AUTHOR INDEX VOLUME 185

A

Abagyan, R. *See* Yu, Abagyan, Dong, Gilbert, Nussenzweig, and Tomlinson.

Acha-Orbea, H. *See* Luther, Gulbranson-Judge, Acha-Orbea, and MacLennan.

Adler, H., Beland, J.L., Del-Pan, N.C., Kobzik, L., Brewer, J.P., Martin, T.R., and Rimm, I.J. Suppression of herpes simplex virus type 1 (HSV-1)–induced pneumonia in mice by inhibition of inducible nitric oxide synthase (iNOS, NOS2). 1533.

Adorini, L. *See* Harrison, Honeyman, Trembleau, Gregori, Gallazzi, Augstein, Brusic, Hammer, and Adorini.

— *See* Winzler, Rovere, Rescigno, Granucci, Penna, Adorini, Zimmermann, Davoust, and Ricciardi-Castagnoli.

Aichele, P. *See* Ehl, Hombach, Aichele, Hengartner, and Zinkernagel.

Aifantis, I. *See* Buer, Aifantis, DiSanto, Fehling, and von Boehmer.

Aiuti, A., Webb, I.J., Bleul, C., Springer, T., and Gutierrez-Ramos, J.C. The chemokine SDF-1 is a chemoattractant for human $CD34^+$ hematopoietic progenitor cells and provides a new mechanism to explain the mobilization of $CD34^+$ progenitors to peripheral blood. 111.

Alexander, H.R. *See* Sarraf, Frederich, Turner, Ma, Jaskowiak, Rivet, Flier, Lowell, Fraker, and Alexander.

Ali, J. *See* Liao, Ali, Greene, and Muller.

Alkhatib, G. *See* Liao, Alkhatib, Peden, Sharma, Berger, and Farber.

Allavena, P. *See* Godiska, Chantry, Raport, Sozzani, Allavena, Leviten, Mantovani, and Gray.

Allen, P.M. *See* Reinhold, Lindberg, Kersh, Allen, and Brown.

Althage, A. *See* Karrer, Althage, Odermatt, Roberts, Korsmeyer, Miyazawaki, Hengartner, and Zinkernagel.

Altman, J.D. *See* Crowley, Reich, Mavaddat, Altman, and Chien.

Altmann, D.M. *See* Rosloniec, Brand, Myers, Whittington, Gumanovskaya, Zaller, Woods, Altmann, Stuart, and Kang.

Anderson, P. *See* Utz, Hottelet, Schur, and Anderson.

Andersson, Å. *See* Lantz, Sharara, Tilloy, Andersson, and DiSanto.

Anguita, J. *See* Rincón, Anguita, Nakamura, Fikrig, and Flavell.

Annels, N.E. *See* Steven, Annels, Kumar, Leese, Kurilla, and Rickinson.

Aranda, R. *See* Hagenbaugh, Sharma, Dubinett, Wei, Aranda, Cheroutre, Fowell, Binder, Tsao, Locksley, Moore, and Kronenberg.

Arase, H. *See* Saijo, Park, Ishida, Arase, and Saito.

Ardouin, L. *See* Lin, Ardouin, Gillet, Malissen, and Malissen.

Aronica, S. *See* Tian, Broxmeyer, Fan, Lai, Zhang, Aronica, Cooper, Bigsby, Steinmetz, Engle, Mestek, Pollock, Lehman, Jansen, Ying, Stambrook, Tischfield, and Yu.

Arpin, C. *See* Lebecque, de Bouteiller, Arpin, Banchereau, and Liu.

Arron, J. *See* Speiser, Lee, Wong, Arron, Santana, Kong, Ohashi, and Choi.

Aruffo, A. *See* Starling, Bajorath, Emswiler, Ledbetter, Aruffo, and Kiener.

Aschauer, H. *See* Billich, Winkler, Aschauer, Rot, and Peichl.

Ashwell, J.D. *See* Vacchio and Ashwell.

Atkins, R.C. *See* Lan, Bacher, Yang, Mu, Nikolic-Paterson, Metz, Meinhardt, Bucala, and Atkins.

Augstein, P. *See* Harrison, Honeyman, Trembleau, Gregori, Gallazzi, Augstein, Brusic, Hammer, and Adorini.

Ausubel, L.J. *See* Bieganowska, Ausubel, Modabber, Slovik, Messersmith, and Hafler.

Aversa, G. *See* Punnonen, Cocks, Carballido, Bennett, Peterson, Aversa, and de Vries.

Aveskogh, M. *See* Lützelschwab, Pejler, Aveskogh, and Hellman.

Avraham, H. *See* Ganju, Hatch, Avraham, Ona, Druker, Avraham, and Groopman.

Avraham, S. *See* Ganju, Hatch, Avraham, Ona, Druker, Avraham, and Groopman.

Aziz, F. *See* Kumar, Aziz, Sercarz, and Miller.

Azuma, T. *See* Doi, Takahashi, Taguchi, Azuma, and Obata.

Azzoni, L. *See* Bennett, Zatsepina, Zamai, Azzoni, Mikheeva, and Perussia.

B

Bach, F.H. *See* Robson, Kaczmarek, Siegel, Candinas, Koziak, Millan, Hancock, and Bach.

Bacher, M. *See* Lan, Bacher, Yang, Mu, Nikolic-Paterson, Metz, Meinhardt, Bucala, and Atkins.

Bachmann, M.F. *See* Fehr, Bachmann, Bucher, Kalinke, Di Padova, Lang, Hengartner, and Zinkernagel.

— *See* Fehr, Schoedon, Odermatt, Holtschke, Schneemann, Bachmann, Mak, Horak, and Zinkernagel.

Bacik, I. *See* Kerkau, Bacik, Bennink, Yewdell, Hünig, Schimpl, and Schubert.

Badley, A.D., Dockrell, D., Simpson, M., Schut, R., Lynch, D.H., Leibson, P., and Paya, C.V. Macrophage-dependent apoptosis of $CD4^+$ T lymphocytes from HIV-infected individuals is mediated by FasL and tumor necrosis factor. 55.

Badou, A. *See* Bridoux, Badou, Saoudi, Bernard, Druet, Pasquier, Druet, and Pelletier.

Baggiolini, M. *See* Forssmann, Uguccioni, Loetscher, Dahinden, Langen, Thelen, and Baggiolini.

Baines, P. *See* Darley, Hoy, Baines, Padua, and Burnett.

Bajorath, J. *See* Starling, Bajorath, Emswiler, Ledbetter, Aruffo, and Kiener.

Baldwin, A.S., Jr. *See* Cogswell, Mayo, and Baldwin.

Baldwin, T.M. *See* Roberts, Baldwin, Curtis, Handman, and Foote.

Ballard, D.W. *See* Boothby, Mora, Scherer, Brockman, and Ballard.

Baltimore, D. *See* Weih, Durham, Barton, Sha, Baltimore, and Bravo.

Banchereau, J. *See* Dubois, Vanbervliet, Fayette, Massacrier, Van Kooten, Brière, Banchereau, and Caux.

— *See* Fayette, Dubois, Vandenabeele, Bridon, Vanbervliet, Durand, Banchereau, Caux, and Brière.

— *See* Flores-Romo, Björck, Duvert, van Kooten, Saeland, and Banchereau.

— *See* Grouard, Rissoan, Filgueira, Durand, Banchereau, and Liu.

— *See* Lebecque, de Bouteiller, Arpin, Banchereau, and Liu.

— *See* Liu, Xu, de Bouteiller, Parham, Grouard, Djossou, de Saint-Vis, Lebecque, Banchereau, and Moore.

Barberis-Maino, L. *See* Rogge, Barberis-Maino, Biffi, Passini, Presky, Gubler, and Sinigaglia.

Barnaba, V., and Sinigaglia, F. Molecular mimicry and T cell–mediated autoimmune disease. 1529.

Barnett, B.C. *See* Galocha, Hill, Barnett, Dolan, Raimondi, Cook, Brunner, McGeoch, and Ploegh.

Barouch, D. *See* Davenport, Smith, Barouch, Reid, Bodnar, Willis, Hunt, and Hill.

Barthlott, T., Kohler, H., and Eichmann, K. Asynchronous coreceptor downregulation after positive thymic selection: prolonged maintenance of the double positive state in CD8 lineage differentiation due to sustained biosynthesis of the CD4 coreceptor. 357.

Barton, D.S. *See* Weih, Durham, Barton, Sha, Baltimore, and Bravo.

Bassanini, P. *See* Kessler, Bassanini, Cerottini, and Luescher.

Baum, L.G. *See* Perillo, Uittenbogaart, Nguyen, and Baum.

Beaudet, A.L. *See* Kanwar, Bullard, Hickey, Smith, Beaudet, Wolitzky, and Kubes.

Beeson, C. *See* Wülfing, Rabinowitz, Beeson, Sjaastad, McConnell, and Davis.

Behm, F.G. *See* Tripp, Hamilton-Easton, Cardin, Nguyen, Behm, Woodland, Doherty, and Blackman.

Beland, J.L. *See* Adler, Beland, Del-Pan, Kobzik, Brewer, Martin, and Rimm.

Bell, E.B. *See* Bunce and Bell.

Bennett, B. *See* Punnonen, Cocks, Carballido, Bennett, Peterson, Aversa, and de Vries.

Bennett, I.M., Zatsepina, O., Zamai, L., Azzoni, L., Mikheeva, T., and Perussia, B. Definition of a natural killer NKR-P1A$^+$/CD56$^-$/CD16$^-$ functionally immature human NK cell subset that

differentiates in vitro in the presence of interleukin 12: Correction. 1149.
Bennink, J.R. *See* Kerkau, Bacik, Bennink, Yewdell, Hünig, Schimpl, and Schubert.
Berg, L.J. *See* Thomis and Berg.
Berger, E.A. *See* Liao, Alkhatib, Peden, Sharma, Berger, and Farber.
Berliner, J.A. *See* McEvoy, Sun, Tsao, Cooke, Berliner, and Butcher.
Bernard, I. *See* Bridoux, Badou, Saoudi, Bernard, Druet, Pasquier, Druet, and Pelletier.
Bervas, N. *See* Pascolo, Bervas, Ure, Smith, Lemonnier, and Pérarnau.
Besmer, E. *See* Sawchuk, Weis-Garcia, Malik, Besmer, Bustin, Nussenzweig, and Cortes.
Bianchi, M. *See* Zhang, Caragine, Wang, Cohen, Botchkina, Soda, Bianchi, Ulrich, Cerami, Sherry, and Tracey.
Bieganowska, K.D., Ausubel, L.J., Modabber, Y., Slovik, E., Messersmith, W., and Hafler, D.A. Direct ex vivo analysis of activated, Fas-sensitive autoreactive T cells in human autoimmune disease. 1585.
Biffi, M. *See* Rogge, Barberis-Maino, Biffi, Passini, Presky, Gubler, and Sinigaglia.
Biggs, J. *See* Theobald, Biggs, Hernández, Lustgarten, Labadie, and Sherman.
Bigsby, R.M. *See* Tian, Broxmeyer, Fan, Lai, Zhang, Aronica, Cooper, Bigsby, Steinmetz, Engle, Mestek, Pollock, Lehman, Jansen, Ying, Stambrook, Tischfield, and Yu.
Billich, A., Winkler, G., Aschauer, H., Rot, A., and Peichl, P. Presence of cyclophilin A in synovial fluids of patients with rheumatoid arthritis. 975.
Binder, D., Fehr, J., Hengartner, H., and Zinkernagel, R.M. Virus-induced transient bone marrow aplasia: major role of interferon-α/β during acute infection with the noncytopathic lymphocytic choriomeningitis virus. 517.
Binder, S. *See* Hagenbaugh, Sharma, Dubinett, Wei, Aranda, Cheroutre, Fowell, Binder, Tsao, Locksley, Moore, and Kronenberg.
Biron, C.A. *See* Ruzek, Miller, Opal, Pearce, and Biron.
Björck, P. *See* Flores-Romo, Björck, Duvert, van Kooten, Saeland, and Banchereau.
Blackman, M.A. *See* Tripp, Hamilton-Easton, Cardin, Nguyen, Behm, Woodland, Doherty, and Blackman.
Bleul, C. *See* Aiuti, Webb, Bleul, Springer, and Gutierrez-Ramos.
Blom, B. *See* Res, Blom, Hori, Weijer, and Spits.
Bloom, B.R. *See* Falcone and Bloom.
Bloom, M.B., Perry-Lalley, D., Robbins, P.F., Li, Y., El-Gamil, M., Rosenberg, S.A., and Yang, J.C. Identification of tyrosinase-related protein 2 as a tumor rejection antigen for the B16 melanoma. 453.
Bluestone, J.A. *See* Madrenas, Chau, Smith, Bluestone, and Germain.
— *See* Sciammas, Kodukula, Tang, Hendricks, and Bluestone.
— *See* Smith, Tso, Clark, Cole, and Bluestone.
Bodian, D.L., Davis, S.J., Morgan, B.P., and Rushmere, N.K. Mutational analysis of the active site and antibody epitopes of the complement-inhibitory glycoprotein, CD59. 507.
— *See* van der Merwe, Bodian, Daenke, Linsley, and Davis.
Bodnar, W.M. *See* Davenport, Smith, Barouch, Reid, Bodnar, Willis, Hunt, and Hill.
Bona, C. *See* Lanoue, Bona, von Boehmer, and Sarukhan.
Bonpane, C. *See* Shaw, Lorens, Dhawan, DalCanto, Tse, Tran, Bonpane, Eswaran, Brocke, Sarvetnick, Steinman, Nolan, and Fathman.
Boothby, M.R., Mora, A.L., Scherer, D.C., Brockman, J.A., and Ballard, D.W. Perturbation of the T lymphocyte lineage in transgenic mice expressing a constitutive repressor of nuclear factor (NF)-κB. 1897.
Bopst, M. *See* Frei, Eugster, Bopst, Constantinescu, Lavi, and Fontana.
Borges, E., Tietz, W., Steegmaier, M., Moll, T., Hallmann, R., Hamann, A., and Vestweber, D. P-selectin glycoprotein ligand-1 (PSGL-1) on T helper 1 but not on T helper 2 cells binds to P-selectin and supports migration into inflamed skin. 573.
Borrego, F. *See* Brooks, Posch, Scorzelli, Borrego, and Coligan.
Borsatti, A. *See* Sica, Saccani, Borsatti, Power, Wells, Luini, Polentarutti, Sozzani, and Mantovani.
Botchkina, G. *See* Zhang, Caragine, Wang, Cohen, Botchkina, Soda, Bianchi, Ulrich, Cerami, Sherry, and Tracey.
Boyaka, P.N. *See* Marinaro, Boyaka, Finkelman, Kiyono, Jackson, Jirillo, and McGhee.
Bradley, L. *See* Zhang, Brunner, Carter, Dutton, Rogers, Bradley, Sato, Reed, Green, and Swain.
Brady, H.R. *See* Takano, Fiore, Maddox, Brady, Petasis, and Serhan.
Brahn, E. *See* Moudgil, Chang, Eradat, Chen, Gupta, Brahn, and Sercarz.
Brand, D.D. *See* Rosloniec, Brand, Myers, Whittington, Gumanovskaya, Zaller, Woods, Altmann, Stuart, and Kang.
Bravo, R. *See* Weih, Durham, Barton, Sha, Baltimore, and Bravo.
Braxton, C.C. *See* van der Poll, Levi, Dentener, Jansen, Coyle, Braxton, Buurman, Hack, ten Cate, and Lowry.
Brenneise, I.E. *See* Lee, McGarry, Farmer, Denzler, Larson, Carrigan, Brenneise, Horton, Haczku, Gelfand, Leikauf, and Lee.
Brewer, J.P. *See* Adler, Beland, Del-Pan, Kobzik, Brewer, Martin, and Rimm.
Bridon, J.-M. *See* Fayette, Dubois, Vandenabeele, Bridon, Vanbervliet, Durand, Banchereau, Caux, and Brière.
Bridoux, F., Badou, A., Saoudi, A., Bernard, I., Druet, E., Pasquier, R., Druet, P., and Pelletier, L. Transforming growth factor β (TGF-β)-dependent inhibition of T helper cell 2 (Th2)-induced autoimmunity by self–major histocompatibility complex (MHC) class II–specific, regulatory $CD4^+$ T cell lines. 1769.
Brière, F. *See* Dubois, Vanbervliet, Fayette, Massacrier, Van Kooten, Brière, Banchereau, and Caux.
— *See* Fayette, Dubois, Vandenabeele, Bridon, Vanbervliet, Durand, Banchereau, Caux, and Brière.
Brocke, S. *See* Shaw, Lorens, Dhawan, DalCanto, Tse, Tran, Bonpane, Eswaran, Brocke, Sarvetnick, Steinman, Nolan, and Fathman.
Brocker, T., Riedinger, M., and Karjalainen, K. Targeted expression of major histocompatibility complex (MHC) class II molecules demonstrates that dendritic cells can induce negative but not positive selection of thymocytes in vivo. 541.
Brockhaus, M. *See* Cella, Döhring, Samaridis, Dessing, Brockhaus, Lanzavecchia, and Colonna.
Brockman, J.A. *See* Boothby, Mora, Scherer, Brockman, and Ballard.
Brodeur, B.R. *See* Martin, Cadieux, Hamel, and Brodeur.
Brooks, A.G., Posch, P.E., Scorzelli, C.J., Borrego, F., and Coligan, J.E. NKG2A complexed with CD94 defines a novel inhibitory natural killer cell receptor. 795.
Brown, D.R., Swier, K., Moskowitz, N.H., Naujokas, M.F., Locksley, R.M., and Reiner, S.L. T helper subset differentiation in the absence of invariant chain. 31.
Brown, E.J. *See* Reinhold, Lindberg, Kersh, Allen, and Brown.
Browne, K. *See* Shi, Mai, Israels, Browne, Trapani, and Greenberg.
Broxmeyer, H.E. *See* Gao, Wynn, Chang, Lee, Broxmeyer, Cooper, Tiffany, Westphal, Kwon-Chung, and Murphy.
— *See* Tian, Broxmeyer, Fan, Lai, Zhang, Aronica, Cooper, Bigsby, Steinmetz, Engle, Mestek, Pollock, Lehman, Jansen, Ying, Stambrook, Tischfield, and Yu.
Brunmark, A. *See* Cai, Kishimoto, Brunmark, Jackson, Peterson, and Sprent.
— *See* Smith, Brunmark, Jackson, and Potter.
Brunner, J. *See* Galocha, Hill, Barnett, Dolan, Raimondi, Cook, Brunner, McGeoch, and Ploegh.
Brunner, T. *See* Zhang, Brunner, Carter, Dutton, Rogers, Bradley, Sato, Reed, Green, and Swain.
Bruno, L., Res, P., Dessing, M., Cella, M., and Spits, H. Identification of a committed T cell precursor population in adult human peripheral blood. 875.
Brusic, V. *See* Harrison, Honeyman, Trembleau, Gregori, Gallazzi, Augstein, Brusic, Hammer, and Adorini.
Bucala, R. *See* Lan, Bacher, Yang, Mu, Nikolic-Paterson, Metz, Meinhardt, Bucala, and Atkins.
Bucher, E. *See* Fehr, Bachmann, Bucher, Kalinke, Di Padova, Lang, Hengartner, and Zinkernagel.
Buer, J., Aifantis, I., DiSanto, J.P., Fehling, H.J., and von Boehmer, H. Role of different T cell receptors in the development of pre–T cells. 1541.
Bullard, D.C. *See* Kanwar, Bullard, Hickey, Smith, Beaudet, Wolitzky, and Kubes.
Bunce, C., and Bell, E.B. CD45RC isoforms define two types of CD4 memory T cells, one of which depends on persisting antigen. 767.
Bürk, M.R., Carena, I., Donda, A., Mariani, F., Mori, L., and De Libero, G. Functional inactivation in the whole population of human Vγ9/Vδ2 T lymphocytes induced by a nonpeptidic antagonist. 91.

Burnett, A.K. *See* Darley, Hoy, Baines, Padua, and Burnett.
Burtrum, D.B. *See* Tourigny, Mazel, Burtrum, and Petrie.
Bustin, M. *See* Sawchuk, Weis-Garcia, Malik, Besmer, Bustin, Nussenzweig, and Cortes.
Butcher, E.C. *See* McEvoy, Sun, Frelinger, and Butcher.
— *See* McEvoy, Sun, Tsao, Cooke, Berliner, and Butcher.
Buurman, W.A. *See* van der Poll, Levi, Dentener, Jansen, Coyle, Braxton, Buurman, Hack, ten Cate, and Lowry.
Byrum, R.S., Goulet, J.L., Griffiths, R.J., and Koller, B.H. Role of the 5-lipoxygenase–activating protein (FLAP) in murine acute inflammatory responses. 1065.
— *See* Griffiths, Smith, Roach, Stock, Stam, Milici, Scampoli, Eskra, Byrum, Koller, and McNeish.

C

Cadieux, C. *See* Rajotte, Cadieux, Haman, Wilkes, Clark, Hercus, Woodcock, Lopez, and Hoang.
Cadieux, N. *See* Martin, Cadieux, Hamel, and Brodeur.
Cai, Z., Kishimoto, H., Brunmark, A., Jackson, M.R., Peterson, P.A., and Sprent, J. Requirements for peptide-induced T cell receptor downregulation on naive $CD8^+$ T cells. 641.
Candinas, D. *See* Robson, Kaczmarek, Siegel, Candinas, Koziak, Millan, Hancock, and Bach.
Cantrell, D.A. *See* Turner and Cantrell.
Cao, Z.A. *See* Conboy, DeKruyff, Tate, Cao, Moore, Umetsu, and Jones.
Caragine, T. *See* Zhang, Caragine, Wang, Cohen, Botchkina, Soda, Bianchi, Ulrich, Cerami, Sherry, and Tracey.
Carballido, J.M. *See* Punnonen, Cocks, Carballido, Bennett, Peterson, Aversa, and de Vries.
Carbone, E., Ruggiero, G., Terrazzano, G., Palomba, C., Manzo, C., Fontana, S., Spits, H., Kärre, K., and Zappacosta, S. A new mechanism of NK cell cytotoxicity activation: the CD40–CD40 ligand interaction. 2053.
Cardin, R.D. *See* Tripp, Hamilton-Easton, Cardin, Nguyen, Behm, Woodland, Doherty, and Blackman.
Carena, I. *See* Bürk, Carena, Donda, Mariani, Mori, and De Libero.
Carmeliet, P. *See* Kitching, Holdsworth, Ploplis, Plow, Collen, Carmeliet, and Tipping.
Carrigan, P.E. *See* Lee, McGarry, Farmer, Denzler, Larson, Carrigan, Brenneise, Horton, Haczku, Gelfand, Leikauf, and Lee.
Carter, L. *See* Zhang, Brunner, Carter, Dutton, Rogers, Bradley, Sato, Reed, Green, and Swain.
Casadevall, A. *See* Nussbaum, Cleare, Casadevall, Scharff, and Valadon.
Casciola-Rosen, L., Wigley, F., and Rosen, A. Scleroderma autoantigens are uniquely fragmented by metal-catalyzed oxidation reactions: implications for pathogenesis. 71.
Castoldi, A.F. *See* Leist, Single, Castoldi, Kühnle, and Nicotera.
Caux, C. *See* Dubois, Vanbervliet, Fayette, Massacrier, Van Kooten, Brière, Banchereau, and Caux.
— *See* Fayette, Dubois, Vandenabeele, Bridon, Vanbervliet, Durand, Banchereau, Caux, and Brière.
Cavalié, A. *See* Neumann, Schmidt, Cavalié, Jenne, and Wekerle.
Cella, M., Döhring, C., Samaridis, J., Dessing, M., Brockhaus, M., Lanzavecchia, A., and Colonna, M. A novel inhibitory receptor (ILT3) expressed on monocytes, macrophages, and dendritic cells involved in antigen processing. 1743.
— *See* Bruno, Res, Dessing, Cella, and Spits.
Ceradini, D. *See* Connor, Sheridan, Ceradini, Choe, and Landau.
Cerami, A. *See* Zhang, Caragine, Wang, Cohen, Botchkina, Soda, Bianchi, Ulrich, Cerami, Sherry, and Tracey.
Cerottini, J.-C. *See* Kessler, Bassanini, Cerottini, and Luescher.
Chamberlain, C.G. *See* Hales, Chamberlain, Murphy, and McAvoy.
Chambers, T.J. *See* Udagawa, Horwood, Elliott, Mackay, Owens, Okamura, Kurimoto, Chambers, Martin, and Gillespie.
Chang, T.T. *See* Moudgil, Chang, Eradat, Chen, Gupta, Brahn, and Sercarz.
Chang, Y. *See* Gao, Wynn, Chang, Lee, Broxmeyer, Cooper, Tiffany, Westphal, Kwon-Chung, and Murphy.
Chantry, D. *See* Godiska, Chantry, Raport, Sozzani, Allavena, Leviten, Mantovani, and Gray.
Chaplin, D.D. *See* Fu, Molina, Matsumoto, Huang, Min, and Chaplin.
Charo, I.F. *See* Sarafi, Garcia-Zepeda, MacLean, Charo, and Luster.
Chau, L.A. *See* Madrenas, Chau, Smith, Bluestone, and Germain.
Chen, A.M. *See* Moudgil, Chang, Eradat, Chen, Gupta, Brahn, and Sercarz.
Chen, L.-Y. *See* Shao, Kono, Chen, Rubin, and Kaye.
Chen, T., Grunert, F., Medina-Marino, A., and Gotschlich, E.C. Several carcinoembryonic antigens (CD66) serve as receptors for gonococcal opacity proteins. 1557.
Cheroutre, H. *See* Hagenbaugh, Sharma, Dubinett, Wei, Aranda, Cheroutre, Fowell, Binder, Tsao, Locksley, Moore, and Kronenberg.
Chien, Y.-h. *See* Crowley, Reich, Mavaddat, Altman, and Chien.
Chiozzi, P. *See* Ferrari, Chiozzi, Falzoni, Hanau, and Di Virgilio.
Choe, H. *See* Wu, Paxton, Kassam, Ruffing, Rottman, Sullivan, Choe, Sodroski, Newman, Koup, and Mackay.
Choe, S. *See* Connor, Sheridan, Ceradini, Choe, and Landau.
Choi, Y. *See* Lee, Lee, and Choi.
— *See* Speiser, Lee, Wong, Arron, Santana, Kong, Ohashi, and Choi.
Christensen, M. *See* Musey, Hu, Eckert, Christensen, Karchmer, and McElrath.
Chung, H.-Y. *See* Jeon, Kang, Kim, Jin, Lee, Chung, Kwon, Park, and Seong.
Ciliberto, G. *See* Peters, Schirmacher, Goldschmitt, Odenthal, Peschel, Fattori, Ciliberto, Dienes, Meyer zum Büschenfelde, and Rose-John.
Clark, E.A. Regulation of B lymphocytes by dendritic cells. 801.
Clark, M.R. *See* Smith, Tso, Clark, Cole, and Bluestone.
Clark, S.C. *See* Rajotte, Cadieux, Haman, Wilkes, Clark, Hercus, Woodcock, Lopez, and Hoang.
Cleare, W. *See* Nussbaum, Cleare, Casadevall, Scharff, and Valadon.
Clynes, R. *See* Sutterwala, Noel, Clynes, and Mosser.
Cocks, B.G. *See* Punnonen, Cocks, Carballido, Bennett, Peterson, Aversa, and de Vries.
Coffman, R.L., and von der Weid, T. Multiple pathways for the initiation of T helper 2 (Th2) responses. 373.
— *See* Murray, Hariprashad, and Coffman.
Cogswell, P.C., Mayo, M.W., and Baldwin, A.S., Jr. Involvement of Egr-1/RelA synergy in distinguishing T cell activation from tumor necrosis factor-α–induced *NF-κB1* transcription. 491.
Cohen, P.S. *See* Zhang, Caragine, Wang, Cohen, Botchkina, Soda, Bianchi, Ulrich, Cerami, Sherry, and Tracey.
Cole, M.S. *See* Smith, Tso, Clark, Cole, and Bluestone.
Coligan, J.E. *See* Brooks, Posch, Scorzelli, Borrego, and Coligan.
Collen, D. *See* Kitching, Holdsworth, Ploplis, Plow, Collen, Carmeliet, and Tipping.
Colonna, M. *See* Cella, Döhring, Samaridis, Dessing, Brockhaus, Lanzavecchia, and Colonna.
— *See* Münz, Holmes, King, Loke, Colonna, Schild, and Rammensee.
Comar, M. *See* Verani, Scarlatti, Comar, Tresoldi, Polo, Giacca, Lusso, Siccardi, and Vercelli.
Conboy, I.M., DeKruyff, R.H., Tate, K.M., Cao, Z.A., Moore, T.A., Umetsu, D.T., and Jones, P.P. Novel genetic regulation of T helper 1 (Th1)/Th2 cytokine production and encephalitogenicity in inbred mouse strains. 439. Correction. 1151.
Congia, M. *See* Cope, Liblau, Yang, Congia, Laudanna, Schreiber, Probert, Kollias, and McDevitt.
Connor, R.I., Sheridan, K.E., Ceradini, D., Choe, S., and Landau, N.R. Change in coreceptor use correlates with disease progression in HIV-1–infected individuals. 621.
Constantinescu, A., and Schlissel, M.S. Changes in locus-specific V(D)J recombinase activity induced by immunoglobulin gene products during B cell development. 609.
Constantinescu, C.S. *See* Frei, Eugster, Bopst, Constantinescu, Lavi, and Fontana.
Cook, R.F. *See* Galocha, Hill, Barnett, Dolan, Raimondi, Cook, Brunner, McGeoch, and Ploegh.
Cooke, J.P. *See* McEvoy, Sun, Tsao, Cooke, Berliner, and Butcher.
Cooper, S. *See* Gao, Wynn, Chang, Lee, Broxmeyer, Cooper, Tiffany, Westphal, Kwon-Chung, and Murphy.
— *See* Tian, Broxmeyer, Fan, Lai, Zhang, Aronica, Cooper, Bigsby, Steinmetz, Engle, Mestek, Pollock, Lehman, Jansen, Ying, Stambrook, Tischfield, and Yu.
Cope, A.P., Liblau, R.S., Yang, X.-D., Congia, M., Laudanna, C., Schreiber, R.D., Probert, L., Kollias, G., and McDevitt, H.O. Chronic tumor necrosis factor alters T cell responses by attenuating T cell receptor signaling. 1573.

Corry, D.B., Folkesson, H.G., Warnock, M.L., Erle, D.J., Matthay, M.A., Wiener-Kronish, J.P., and Locksley, R.M. Interleukin 4, but not interleukin 5 or eosinophils, is required in a murine model of acute airway hyperreactivity: Correction. 1715.
— *See* Grünig, Corry, Leach, Seymour, Kurup, and Rennick.
Cortes, P. *See* Sawchuk, Weis-Garcia, Malik, Besmer, Bustin, Nussenzweig, and Cortes.
Coyle, A.J. *See* Tsuyuki, Tsuyuki, Einsle, Kopf, and Coyle.
Coyle, S.M. *See* van der Poll, Levi, Dentener, Jansen, Coyle, Braxton, Buurman, Hack, ten Cate, and Lowry.
Crowley, M.P., Reich, Z., Mavaddat, N., Altman, J.D., and Chien, Y.-h. The recognition of the nonclassical major histocompatibility complex (MHC) class I molecule, T10, by the γδ T cell, G8. 1223.
Curtis, J.M. *See* Roberts, Baldwin, Curtis, Handman, and Foote.

D

Daenke, S. *See* van der Merwe, Bodian, Daenke, Linsley, and Davis.
Dahinden, C.A. *See* Forssmann, Uguccioni, Loetscher, Dahinden, Langen, Thelen, and Baggiolini.
DalCanto, R. *See* Shaw, Lorens, Dhawan, DalCanto, Tse, Tran, Bonpane, Eswaran, Brocke, Sarvetnick, Steinman, Nolan, and Fathman.
Darley, R.L., Hoy, T.G., Baines, P., Padua, R.A., and Burnett, A.K. Mutant *N-RAS* induces erythroid lineage dysplasia in human $CD34^+$ cells. 1337.
Das, B., Mondragon, M.O., Tao, S.-Z., and Norin, A.J. Preferential interaction of a novel tumor surface protein (p38.5) with naive natural killer cells. 1735.
Davenport, M.P., Smith, K.J., Barouch, D., Reid, S.W., Bodnar, W.M., Willis, A.C., Hunt, D.F., and Hill, A.V.S. HLA class I binding motifs derived from random peptide libraries differ at the COOH terminus from those of eluted peptides. 367.
Davis, M.M. *See* Wülfing, Rabinowitz, Beeson, Sjaastad, McConnell, and Davis.
Davis, P.M. *See* Kiener, Davis, Starling, Mehlin, Klebanoff, Ledbetter, and Liles.
Davis, S.J. *See* Bodian, Davis, Morgan, and Rushmere.
— *See* van der Merwe, Bodian, Daenke, Linsley, and Davis.
Davoust, J. *See* Winzler, Rovere, Rescigno, Granucci, Penna, Adorini, Zimmermann, Davoust, and Ricciardi-Castagnoli.
Dbaibo, G.S., Perry, D.K., Gamard, C.J., Platt, R., Poirier, G.G., Obeid, L.M., and Hannun, Y.A. Cytokine response modifier A (CrmA) inhibits ceramide formation in response to tumor necrosis factor (TNF)-α: CrmA and Bcl-2 target distinct components in the apoptotic pathway. 481.
de Bouteiller, O. *See* Lebecque, de Bouteiller, Arpin, Banchereau, and Liu.
— *See* Liu, Xu, de Bouteiller, Parham, Grouard, Djossou, de Saint-Vis, Lebecque, Banchereau, and Moore.
DeKruyff, R.H. *See* Conboy, DeKruyff, Tate, Cao, Moore, Umetsu, and Jones.
Delcourt, M., Thibodeau, J., Denis, F., and Sekaly, R.-P. Paracrine transfer of mouse mammary tumor virus superantigen. 471.
De Libero, G. *See* Bürk, Carena, Donda, Mariani, Mori, and De Libero.
Del-Pan, N.C. *See* Adler, Beland, Del-Pan, Kobzik, Brewer, Martin, and Rimm.
Denis, F. *See* Delcourt, Thibodeau, Denis, and Sekaly.
Dentener, M. *See* van der Poll, Levi, Dentener, Jansen, Coyle, Braxton, Buurman, Hack, ten Cate, and Lowry.
Denzler, K.L. *See* Lee, McGarry, Farmer, Denzler, Larson, Carrigan, Brenneise, Horton, Haczku, Gelfand, Leikauf, and Lee.
de Saint-Vis, B. *See* Liu, Xu, de Bouteiller, Parham, Grouard, Djossou, de Saint-Vis, Lebecque, Banchereau, and Moore.
Descoteaux, A. *See* Desjardins and Descoteaux.
Desjardins, M., and Descoteaux, A. Inhibition of phagolysosomal biogenesis by the *Leishmania* lipophosphoglycan. 2061.
— *See* Gruenheid, Pinner, Desjardins, and Gros.
Dessing, M. *See* Bruno, Res, Dessing, Cella, and Spits.
— *See* Cella, Döhring, Samaridis, Dessing, Brockhaus, Lanzavecchia, and Colonna.
de Vries, J.E. *See* Punnonen, Cocks, Carballido, Bennett, Peterson, Aversa, and de Vries.
Dhawan, A. *See* Shaw, Lorens, Dhawan, DalCanto, Tse, Tran, Bonpane, Eswaran, Brocke, Sarvetnick, Steinman, Nolan, and Fathman.
Diamond, B. *See* Spatz, Saenko, Iliev, Jones, Geskin, and Diamond.
Dienes, H.-P. *See* Peters, Schirmacher, Goldschmitt, Odenthal, Peschel, Fattori, Ciliberto, Dienes, Meyer zum Büschenfelde, and Rose-John.
Dighe, A.S. *See* Szabo, Dighe, Gubler, and Murphy.
Dikic, I. *See* Qian, Lev, van Oers, Dikic, Schlessinger, and Weiss.
Dimmeler, S., Haendeler, J., Nehls, M., and Zeiher, A.M. Suppression of apoptosis by nitric oxide via inhibition of interleukin-1β–converting enzyme (ICE)-like and cysteine protease protein (CPP)-32–like proteases. 601.
Dinauer, M.C. *See* Morgenstern, Gifford, Li, Doerschuk, and Dinauer.
Di Padova, F.E. *See* Fehr, Bachmann, Bucher, Kalinke, Di Padova, Lang, Hengartner, and Zinkernagel.
DiSanto, J.P. *See* Buer, Aifantis, DiSanto, Fehling, and von Boehmer.
— *See* Lantz, Sharara, Tilloy, Andersson, and DiSanto.
Di Virgilio, F. *See* Ferrari, Chiozzi, Falzoni, Hanau, and Di Virgilio.
Djossou, O. *See* Liu, Xu, de Bouteiller, Parham, Grouard, Djossou, de Saint-Vis, Lebecque, Banchereau, and Moore.
Dobrina, A. *See* Tedesco, Pausa, Nardon, Introna, Mantovani, and Dobrina.
Dockrell, D. *See* Badley, Dockrell, Simpson, Schut, Lynch, Leibson, and Paya.
Doerschuk, C.M. *See* Morgenstern, Gifford, Li, Doerschuk, and Dinauer.
Doherty, P.C. *See* Tripp, Hamilton-Easton, Cardin, Nguyen, Behm, Woodland, Doherty, and Blackman.
Döhring, C. *See* Cella, Döhring, Samaridis, Dessing, Brockhaus, Lanzavecchia, and Colonna.
Doi, T.S., Takahashi, T., Taguchi, O., Azuma, T., and Obata, Y. NF-κB RelA-deficient lymphocytes: normal development of T cells and B cells, impaired production of IgA and IgG1 and reduced proliferative responses. 953.
Dolan, A. *See* Galocha, Hill, Barnett, Dolan, Raimondi, Cook, Brunner, McGeoch, and Ploegh.
Donda, A. *See* Bürk, Carena, Donda, Mariani, Mori, and De Libero.
Dong, S. *See* Yu, Abagyan, Dong, Gilbert, Nussenzweig, and Tomlinson.
Dorf, M.E. *See* Lloyd, Minto, Dorf, Proudfoot, Wells, Salant, and Gutierrez-Ramos.
Douhan, J., III, Lieberson, R., Knoll, J.H.M., Zhou, H., and Glimcher, L.H. An isotype-specific activator of major histocompatibility complex (MHC) class II genes that is independent of class II transactivator. 1885.
Druet, E. *See* Bridoux, Badou, Saoudi, Bernard, Druet, Pasquier, Druet, and Pelletier.
Druet, P. *See* Bridoux, Badou, Saoudi, Bernard, Druet, Pasquier, Druet, and Pelletier.
Druker, B. *See* Ganju, Hatch, Avraham, Ona, Druker, Avraham, and Groopman.
Dubey, P., Hendrickson, R.C., Meredith, S.C., Siegel, C.T., Shabanowitz, J., Skipper, J.C.A., Engelhard, V.H., Hunt, D.F., and Schreiber, H. The immunodominant antigen of an ultraviolet-induced regressor tumor is generated by a somatic point mutation in the DEAD box helicase p68. 695.
Dubinett, S.M. *See* Hagenbaugh, Sharma, Dubinett, Wei, Aranda, Cheroutre, Fowell, Binder, Tsao, Locksley, Moore, and Kronenberg.
Dubois, B., Vanbervliet, B., Fayette, J., Massacrier, C., Van Kooten, C., Brière, F., Banchereau, J., and Caux, C. Dendritic cells enhance growth and differentiation of CD40-activated B lymphocytes. 941.
— *See* Fayette, Dubois, Vandenabeele, Bridon, Vanbervliet, Durand, Banchereau, Caux, and Brière.
Duncan, G.S. *See* Suzuki, Duncan, Takimoto, and Mak.
Durand, I. *See* Fayette, Dubois, Vandenabeele, Bridon, Vanbervliet, Durand, Banchereau, Caux, and Brière.
— *See* Grouard, Rissoan, Filgueira, Durand, Banchereau, and Liu.
Durham, S.K. *See* Weih, Durham, Barton, Sha, Baltimore, and Bravo.
Dutton, R.W. *See* Zhang, Brunner, Carter, Dutton, Rogers, Bradley, Sato, Reed, Green, and Swain.

Duvert, V. *See* Flores-Romo, Björck, Duvert, van Kooten, Saeland, and Banchereau.

E

Eckert, L. *See* Musey, Hu, Eckert, Christensen, Karchmer, and McElrath.
Edinger, J. *See* Posnett and Edinger.
Egger, C. *See* Strunk, Egger, Leitner, Hanau, and Stingl.
Ehl, S., Hombach, J., Aichele, P., Hengartner, H., and Zinkernagel, R.M. Bystander activation of cytotoxic T cells: studies on the mechanism and evaluation of in vivo significance in a transgenic mouse model. 1241.
Eichmann, K. *See* Barthlott, Kohler, and Eichmann.
Einsle, K. *See* Tsuyuki, Tsuyuki, Einsle, Kopf, and Coyle.
El-Gamil, M. *See* Bloom, Perry-Lalley, Robbins, Li, El-Gamil, Rosenberg, and Yang.
Elliott, J. *See* Udagawa, Horwood, Elliott, Mackay, Owens, Okamura, Kurimoto, Chambers, Martin, and Gillespie.
Emswiler, J. *See* Starling, Bajorath, Emswiler, Ledbetter, Aruffo, and Kiener.
Engelhard, V.H. *See* Dubey, Hendrickson, Meredith, Siegel, Shabanowitz, Skipper, Engelhard, Hunt, and Schreiber.
Engle, S.J. *See* Tian, Broxmeyer, Fan, Lai, Zhang, Aronica, Cooper, Bigsby, Steinmetz, Engle, Mestek, Pollock, Lehman, Jansen, Ying, Stambrook, Tischfield, and Yu.
Eradat, H. *See* Moudgil, Chang, Eradat, Chen, Gupta, Brahn, and Sercarz.
Erb, K.J., Rüger, B., von Brevern, M., Ryffel, B., Schimpl, A., and Rivett, K. Constitutive expression of interleukin (IL)-4 in vivo causes autoimmune-type disorders in mice. 329.
Erjefält, J.S. *See* Korsgren, Erjefält, Korsgren, Sundler, and Persson.
Erle, D.J. *See* Corry, Folkesson, Warnock, Erle, Matthay, Wiener-Kronish, and Locksley.
Eskra, J.D. *See* Griffiths, Smith, Roach, Stock, Stam, Milici, Scampoli, Eskra, Byrum, Koller, and McNeish.
Eswaran, S.L. *See* Shaw, Lorens, Dhawan, DalCanto, Tse, Tran, Bonpane, Eswaran, Brocke, Sarvetnick, Steinman, Nolan, and Fathman.
Eugster, H.-P. *See* Frei, Eugster, Bopst, Constantinescu, Lavi, and Fontana.
Evans, J. *See* Goulder, Sewell, Lalloo, Price, Whelan, Evans, Taylor, Luzzi, Giangrande, Phillips, and McMichael.
Ezaki, T. *See* Kudo, Matsuno, Ezaki, and Ogawa.

F

Falcone, M., and Bloom, B.R. A T helper cell 2 (Th2) immune response against non-self antigens modifies the cytokine profile of autoimmune T cells and protects against experimental allergic encephalomyelitis. 901.
Falzoni, S. *See* Ferrari, Chiozzi, Falzoni, Hanau, and Di Virgilio.
Fan, Y. *See* Tian, Broxmeyer, Fan, Lai, Zhang, Aronica, Cooper, Bigsby, Steinmetz, Engle, Mestek, Pollock, Lehman, Jansen, Ying, Stambrook, Tischfield, and Yu.
Farber, J.M. *See* Liao, Alkhatib, Peden, Sharma, Berger, and Farber.
Farmer, S.C. *See* Lee, McGarry, Farmer, Denzler, Larson, Carrigan, Brenneise, Horton, Haczku, Gelfand, Leikauf, and Lee.
Fathman, C.G. *See* Shaw, Lorens, Dhawan, DalCanto, Tse, Tran, Bonpane, Eswaran, Brocke, Sarvetnick, Steinman, Nolan, and Fathman.
Fattori, E. *See* Peters, Schirmacher, Goldschmitt, Odenthal, Peschel, Fattori, Ciliberto, Dienes, Meyer zum Büschenfelde, and Rose-John.
Fayette, J., Dubois, B., Vandenabeele, S., Bridon, J.-M., Vanbervliet, B., Durand, I., Banchereau, J., Caux, C., and Brière, F. Human dendritic cells skew isotype switching of CD40-activated naive B cells towards IgA_1 and IgA_2. 1909.
— *See* Dubois, Vanbervliet, Fayette, Massacrier, Van Kooten, Brière, Banchereau, and Caux.
Fehling, H.J. *See* Buer, Aifantis, DiSanto, Fehling, and von Boehmer.
Fehr, J. *See* Binder, Fehr, Hengartner, and Zinkernagel.
Fehr, T., Bachmann, M.F., Bucher, E., Kalinke, U., Di Padova, F.E., Lang, A.B., Hengartner, H., and Zinkernagel, R.M. Role of repetitive antigen patterns for induction of antibodies against antibodies. 1785.
—, **Schoedon, G., Odermatt, B., Holtschke, T., Schneemann, M., Bachmann, M.F., Mak, T.W., Horak, I., and Zinkernagel, R.M.** Crucial role of interferon consensus sequence binding protein, but neither of interferon regulatory factor 1 nor of nitric oxide synthesis for protection against murine listeriosis. 921.
Ferrari, D., Chiozzi, P., Falzoni, S., Hanau, S., and Di Virgilio, F. Purinergic modulation of interleukin-1β release from microglial cells stimulated with bacterial endotoxin. 579.
Fikrig, E. *See* Rincón, Anguita, Nakamura, Fikrig, and Flavell.
Filgueira, L. *See* Grouard, Rissoan, Filgueira, Durand, Banchereau, and Liu.
Fink, K.B. *See* Friedlander, Gagliardini, Hara, Fink, Li, MacDonald, Fishman, Greenberg, Moskowitz, and Yuan.
Finkelman, F.D. *See* Marinaro, Boyaka, Finkelman, Kiyono, Jackson, Jirillo, and McGhee.
Fiore, S. *See* Takano, Fiore, Maddox, Brady, Petasis, and Serhan.
Fisher, M.J. *See* Nakamura, Niemi, Fisher, Shultz, Seaman, and Ryan.
Fishman, M.C. *See* Friedlander, Gagliardini, Hara, Fink, Li, MacDonald, Fishman, Greenberg, Moskowitz, and Yuan.
Flad, H.-D. *See* Schönbeck, Herzberg, Petersen, Wohlenberg, Gerdes, Flad, and Loppnow.
Flavell, R.A. *See* Rincón, Anguita, Nakamura, Fikrig, and Flavell.
Fleckenstein, B.T. *See* Hemmer, Fleckenstein, Vergelli, Jung, McFarland, Martin, and Wiesmüller.
Fleming, T. *See* Yamaguchi, Lantz, Oettgen, Katona, Fleming, Miyajima, Kinet, and Galli.
Flier, J.S. *See* Sarraf, Frederich, Turner, Ma, Jaskowiak, Rivet, Flier, Lowell, Fraker, and Alexander.
Flores-Romo, L., Björck, P., Duvert, V., van Kooten, C., Saeland, S., and Banchereau, J. CD40 ligation on human cord blood $CD34^+$ hematopoietic progenitors induces their proliferation and differentiation into functional dendritic cells. 341.
Folkesson, H.G. *See* Corry, Folkesson, Warnock, Erle, Matthay, Wiener-Kronish, and Locksley.
Fontana, A. *See* Frei, Eugster, Bopst, Constantinescu, Lavi, and Fontana.
Fontana, S. *See* Carbone, Ruggiero, Terrazzano, Palomba, Manzo, Fontana, Spits, Kärre, and Zappacosta.
Foote, S.J. *See* Roberts, Baldwin, Curtis, Handman, and Foote.
Forbush, K.A. *See* Norment, Forbush, Nguyen, Malissen, and Perlmutter.
Forssmann, U., Uguccioni, M., Loetscher, P., Dahinden, C.A., Langen, H., Thelen, M., and Baggiolini, M. Eotaxin-2, a novel CC chemokine that is selective for the chemokine receptor CCR3, and acts like eotaxin on human eosinophil and basophil leukocytes. 2171.
Fossati, L. *See* Santiago, Fossati, Jacquet, Müller, Izui, and Reininger.
Fotopoulos, G. *See* Velin, Fotopoulos, Luthi, and Kraehenbuhl.
Fowell, D.J. *See* Hagenbaugh, Sharma, Dubinett, Wei, Aranda, Cheroutre, Fowell, Binder, Tsao, Locksley, Moore, and Kronenberg.
Fowlkes, B.J. *See* van Meerwijk, Marguerat, Lees, Germain, Fowlkes, and MacDonald.
Fraker, D.L. *See* Sarraf, Frederich, Turner, Ma, Jaskowiak, Rivet, Flier, Lowell, Fraker, and Alexander.
Frank, D.A. *See* Karras, Wang, Huo, Howard, Frank, and Rothstein.
Frederich, R.C. *See* Sarraf, Frederich, Turner, Ma, Jaskowiak, Rivet, Flier, Lowell, Fraker, and Alexander.
Freeman, J. *See* Serdobova, Pla, Reichenbach, Sperisen, Ghysdael, Wilson, Freeman, and Nabholz.
Frei, K., Eugster, H.-P., Bopst, M., Constantinescu, C.S., Lavi, E., and Fontana, A. Tumor necrosis factor α and lymphotoxin α are not required for induction of acute experimental autoimmune encephalomyelitis. 2177.
Frelinger, J.G. *See* McEvoy, Sun, Frelinger, and Butcher.
Friedlander, R.M., Gagliardini, V., Hara, H., Fink, K.B., Li, W., MacDonald, G., Fishman, M.C., Greenberg, A.H., Moskowitz, M.A., and Yuan, J. Expression of a dominant negative mutant of interleukin-1β converting enzyme in transgenic mice prevents neuronal cell death induced by trophic factor withdrawal and ischemic brain injury. 933.
Fu, Y.-X., Molina, H., Matsumoto, M., Huang, G., Min, J., and Chaplin, D.D. Lymphotoxin-α (LTα) supports development of splenic follicular structure that is required for IgG responses. 2111.

Fujihashi, K. *See* Yamamoto, Takeda, Yamamoto, Kurazono, Imaoka, Yamamoto, Fujihashi, Noda, Kiyono, and McGhee.
Fukuda, T. *See* Yamanashi, Fukuda, Nishizumi, Inazu, Higashi, Kitamura, Ishida, Yamamura, Watanabe, and Yamamoto.

G

Gagliardini, V. *See* Friedlander, Gagliardini, Hara, Fink, Li, MacDonald, Fishman, Greenberg, Moskowitz, and Yuan.
Gallazzi, F. *See* Harrison, Honeyman, Trembleau, Gregori, Gallazzi, Augstein, Brusic, Hammer, and Adorini.
Galli, S.J. *See* Yamaguchi, Lantz, Oettgen, Katona, Fleming, Miyajima, Kinet, and Galli.
Galocha, B., Hill, A., Barnett, B.C., Dolan, A., Raimondi, A., Cook, R.F., Brunner, J., McGeoch, D.J., and Ploegh, H.L. The active site of ICP47, a herpes simplex virus–encoded inhibitor of the major histocompatibility complex (MHC)-encoded peptide transporter associated with antigen processing (TAP), maps to the NH_2-terminal 35 residues. 1565.
Gamard, C.J. *See* Dbaibo, Perry, Gamard, Platt, Poirier, Obeid, and Hannun.
Ganju, R.K., Hatch, W.C., Avraham, H., Ona, M.A., Druker, B., Avraham, S., and Groopman, J.E. RAFTK, a novel member of the focal adhesion kinase family, is phosphorylated and associates with signaling molecules upon activation of mature T lymphocytes. 1055.
Gao, J.-L., Wynn, T.A., Chang, Y., Lee, E.J., Broxmeyer, H.E., Cooper, S., Tiffany, H.L., Westphal, H., Kwon-Chung, J., and Murphy, P.M. Impaired host defense, hematopoiesis, granulomatous inflammation and type 1–type 2 cytokine balance in mice lacking CC chemokine receptor 1. 1959.
Garcia-Zepeda, E.A. *See* Sarafi, Garcia-Zepeda, MacLean, Charo, and Luster.
Garotta, G. *See* Patel, Kreider, Li, Li, Leung, Salcedo, Nardelli, Pippalla, Gentz, Thotakura, Parmelee, Gentz, and Garotta.
Gelfand, E.W. *See* Lee, McGarry, Farmer, Denzler, Larson, Carrigan, Brenneise, Horton, Haczku, Gelfand, Leikauf, and Lee.
Gentz, R. *See* Patel, Kreider, Li, Li, Leung, Salcedo, Nardelli, Pippalla, Gentz, Thotakura, Parmelee, Gentz, and Garotta.
Gentz, S. *See* Patel, Kreider, Li, Li, Leung, Salcedo, Nardelli, Pippalla, Gentz, Thotakura, Parmelee, Gentz, and Garotta.
Gerdes, J. *See* Schönbeck, Herzberg, Petersen, Wohlenberg, Gerdes, Flad, and Loppnow.
Germain, R.N. *See* Madrenas, Chau, Smith, Bluestone, and Germain.
— *See* van Meerwijk, Marguerat, Lees, Germain, Fowlkes, and MacDonald.
— *See* Zhong, Romagnoli, and Germain.
Geskin, L. *See* Spatz, Sacnko, Iliev, Jones, Geskin, and Diamond.
Ghysdael, J. *See* Serdobova, Pla, Reichenbach, Sperisen, Ghysdael, Wilson, Freeman, and Nabholz.
Giacca, M. *See* Verani, Scarlatti, Comar, Tresoldi, Polo, Giacca, Lusso, Siccardi, and Vercelli.
Giangrande, P. *See* Goulder, Sewell, Lalloo, Price, Whelan, Evans, Taylor, Luzzi, Giangrande, Phillips, and McMichael.
Gifford, M.A.C. *See* Morgenstern, Gifford, Li, Doerschuk, and Dinauer.
Gilbert, A. *See* Yu, Abagyan, Dong, Gilbert, Nussenzweig, and Tomlinson.
Gillespie, M.T. *See* Udagawa, Horwood, Elliott, Mackay, Owens, Okamura, Kurimoto, Chambers, Martin, and Gillespie.
Gillet, A. *See* Lin, Ardouin, Gillet, Malissen, and Malissen.
Glimcher, L.H. *See* Douhan, Lieberson, Knoll, Zhou, and Glimcher.
Godiska, R., Chantry, D., Raport, C.J., Sozzani, S., Allavena, P., Leviten, D., Mantovani, A., and Gray, P.W. Human macrophage–derived chemokine (MDC), a novel chemoattractant for monocytes, monocyte-derived dendritic cells, and natural killer cells. 1595.
Goldschmitt, J. *See* Peters, Schirmacher, Goldschmitt, Odenthal, Peschel, Fattori, Ciliberto, Dienes, Meyer zum Büschenfelde, and Rose-John.
Gotschlich, E.C. *See* Chen, Grunert, Medina-Marino, and Gotschlich.
Goulder, P.J.R., Sewell, A.K., Lalloo, D.G., Price, D.A., Whelan, J.A., Evans, J., Taylor, G.P., Luzzi, G., Giangrande, P., Phillips, R.E., and McMichael, A.J. Patterns of immunodominance in HIV-1–specific cytotoxic T lymphocyte responses in two human histocompatibility leukocyte antigens (HLA)-identical siblings with HLA-A*0201 are influenced by epitope mutation. 1423.
Goulet, J.L. *See* Byrum, Goulet, Griffiths, and Koller.
Granucci, F. *See* Winzler, Rovere, Rescigno, Granucci, Penna, Adorini, Zimmermann, Davoust, and Ricciardi-Castagnoli.
Gray, P.W. *See* Godiska, Chantry, Raport, Sozzani, Allavena, Leviten, Mantovani, and Gray.
Green, D. *See* Zhang, Brunner, Carter, Dutton, Rogers, Bradley, Sato, Reed, Green, and Swain.
Green, N.S. *See* Scharff, Poltoratsky, and Green.
Greenberg, A.H. *See* Friedlander, Gagliardini, Hara, Fink, Li, MacDonald, Fishman, Greenberg, Moskowitz, and Yuan.
— *See* Shi, Mai, Israels, Browne, Trapani, and Greenberg.
Greene, T. *See* Liao, Ali, Greene, and Muller.
Gregori, S. *See* Harrison, Honeyman, Trembleau, Gregori, Gallazzi, Augstein, Brusic, Hammer, and Adorini.
Grell, M. *See* Lazdins, Grell, Walker, Woods-Cook, Scheurich, and Pfizenmaier.
Griffiths, R.J., Smith, M., Roach, M.L., Stock, J.L., Stam, E.J., Milici, A.J., Scampoli, D.N., Eskra, J.D., Byrum, R.S., Koller, B.H., and McNeish, J.D. Collagen-induced arthritis is reduced in 5-lipoxygenase-activating protein-deficient mice. 1123.
— *See* Byrum, Goulet, Griffiths, and Koller.
Grimm, R. *See* Preckel, Grimm, Martin, and Weltzien.
Grimm, S., and Leder, P. An apoptosis-inducing isoform of Neu differentiation factor (NDF) identified using a novel screen for dominant, apoptosis-inducing genes. 1137.
Grinberg, A. *See* Shores, Tran, Grinberg, Sommers, Shen, and Love.
Groenink, M. *See* van der Voort, Taher, Keehnen, Smit, Groenink, and Pals.
Groopman, J.E. *See* Ganju, Hatch, Avraham, Ona, Druker, Avraham, and Groopman.
Gros, P. *See* Gruenheid, Pinner, Desjardins, and Gros.
Grouard, G., Rissoan, M.-C., Filgueira, L., Durand, I., Banchereau, J., and Liu, Y.-J. The enigmatic plasmacytoid T cells develop into dendritic cells with interleukin (IL)-3 and CD40-ligand. 1101.
— *See* Liu, Xu, de Bouteiller, Parham, Grouard, Djossou, de Saint-Vis, Lebecque, Banchereau, and Moore.
Gruenheid, S., Pinner, E., Desjardins, M., and Gros, P. Natural resistance to infection with intracellular pathogens: the *Nramp1* protein is recruited to the membrane of the phagosome. 717.
Grunert, F. *See* Chen, Grunert, Medina-Marino, and Gotschlich.
Grünig, G., Corry, D.B., Leach, M.W., Seymour, B.W.P., Kurup, V.P., and Rennick, D.M. Interleukin-10 is a natural suppressor of cytokine production and inflammation in a murine model of allergic bronchopulmonary aspergillosis. 1089.
Gubler, U. *See* Rogge, Barberis-Maino, Biffi, Passini, Presky, Gubler, and Sinigaglia.
— *See* Szabo, Dighe, Gubler, and Murphy.
Gulbranson-Judge, A. *See* Luther, Gulbranson-Judge, Acha-Orbea, and MacLennan.
Gumanovskaya, M. *See* Rosloniec, Brand, Myers, Whittington, Gumanovskaya, Zaller, Woods, Altmann, Stuart, and Kang.
Guo, Y. *See* Wu, Guo, Huang, Zheng, and Liu.
Gupta, R.S. *See* Moudgil, Chang, Eradat, Chen, Gupta, Brahn, and Sercarz.
Gutierrez-Ramos, J.-C. *See* Lloyd, Minto, Dorf, Proudfoot, Wells, Salant, and Gutierrez-Ramos.
— *See* Aiuti, Webb, Bleul, Springer, and Gutierrez-Ramos.

H

Hack, C.E. *See* van der Poll, Levi, Dentener, Jansen, Coyle, Braxton, Buurman, Hack, ten Cate, and Lowry.
Haczku, A. *See* Lee, McGarry, Farmer, Denzler, Larson, Carrigan, Brenneise, Horton, Haczku, Gelfand, Leikauf, and Lee.

Haendeler, J. *See* Dimmeler, Haendeler, Nehls, and Zeiher.
Hafler, D.A. *See* Bieganowska, Ausubel, Modabber, Slovik, Messersmith, and Hafler.
Hagenbaugh, A., Sharma, S., Dubinett, S.M., Wei, S.H.-Y., Aranda, R., Cheroutre, H., Fowell, D.J., Binder, S., Tsao, B., Locksley, R.M., Moore, K.W., and Kronenberg, M. Altered immune responses in interleukin 10 transgenic mice. 2101.
Hales, A.M., Chamberlain, C.G., Murphy, C.R., and McAvoy, J.W. Estrogen protects lenses against cataract induced by transforming growth factor-β (TGFβ). 273.
Hallmann, R. *See* Borges, Tietz, Steegmaier, Moll, Hallmann, Hamann, and Vestweber.
Hamad, A.R.A., Marrack, P., and Kappler, J.W. Transcytosis of staphylococcal superantigen toxins. 1447.
Haman, A. *See* Rajotte, Cadieux, Haman, Wilkes, Clark, Hercus, Woodcock, Lopez, and Hoang.
Hamann, A. *See* Borges, Tietz, Steegmaier, Moll, Hallmann, Hamann, and Vestweber.
Hamel, J. *See* Martin, Cadieux, Hamel, and Brodeur.
Hamilton-Easton, A.M. *See* Tripp, Hamilton-Easton, Cardin, Nguyen, Behm, Woodland, Doherty, and Blackman.
Hammer, J. *See* Harrison, Honeyman, Trembleau, Gregori, Gallazzi, Augstein, Brusic, Hammer, and Adorini.
Hanau, D. *See* Strunk, Egger, Leitner, Hanau, and Stingl.
Hanau, S. *See* Ferrari, Chiozzi, Falzoni, Hanau, and Di Virgilio.
Hancock, W.W. *See* Robson, Kaczmarek, Siegel, Candinas, Koziak, Millan, Hancock, and Bach.
Handman, E. *See* Roberts, Baldwin, Curtis, Handman, and Foote.
Hannun, Y.A. *See* Dbaibo, Perry, Gamard, Platt, Poirier, Obeid, and Hannun.
Hara, H. *See* Friedlander, Gagliardini, Hara, Fink, Li, MacDonald, Fishman, Greenberg, Moskowitz, and Yuan.
Hariprashad, J. *See* Murray, Hariprashad, and Coffman.
Harris, N., Peach, R., Naemura, J., Linsley, P.S., Le Gros, G., and Ronchese, F. CD80 costimulation is essential for the induction of airway eosinophilia. 177.
Harrison, L.C., Honeyman, M.C., Trembleau, S., Gregori, S., Gallazzi, F., Augstein, P., Brusic, V., Hammer, J., and Adorini, L. A peptide-binding motif for I-A^{g7}, the class II major histocompatibility complex (MHC) molecule of NOD and biozzi AB/H mice. 1013.
Hatch, W.C. *See* Ganju, Hatch, Avraham, Ona, Druker, Avraham, and Groopman.
Held, W., and Raulet, D.H. Ly49A transgenic mice provide evidence for a major histocompatibility complex–dependent education process in natural killer cell development. 2079.
Hellman, L. *See* Lützelschwab, Pejler, Aveskogh, and Hellman.
Hemmer, B., Fleckenstein, B.T., Vergelli, M., Jung, G., McFarland, H., Martin, R., and Wiesmüller, K.-H. Identification of high potency microbial and self ligands for a human autoreactive class II–restricted T cell clone. 1651.
Hendricks, R.L. *See* Sciammas, Kodukula, Tang, Hendricks, and Bluestone.
Hendrickson, R.C. *See* Dubey, Hendrickson, Meredith, Siegel, Shabanowitz, Skipper, Engelhard, Hunt, and Schreiber.
Hengartner, H. *See* Binder, Fehr, Hengartner, and Zinkernagel.
— *See* Ehl, Hombach, Aichele, Hengartner, and Zinkernagel.
— *See* Fehr, Bachmann, Bucher, Kalinke, Di Padova, Lang, Hengartner, and Zinkernagel.
— *See* Karrer, Althage, Odermatt, Roberts, Korsmeyer, Miyawaki, Hengartner, and Zinkernagel.
Hercus, T. *See* Rajotte, Cadieux, Haman, Wilkes, Clark, Hercus, Woodcock, Lopez, and Hoang.
Hernández, J. *See* Theobald, Biggs, Hernández, Lustgarten, Labadie, and Sherman.
Herzberg, M. *See* Schönbeck, Herzberg, Petersen, Wohlenberg, Gerdes, Flad, and Loppnow.
Hickey, M.J. *See* Kanwar, Bullard, Hickey, Smith, Beaudet, Wolitzky, and Kubes.
Higashi, K.-i. *See* Yamanashi, Fukuda, Nishizumi, Inazu, Higashi, Kitamura, Ishida, Yamamura, Watanabe, and Yamamoto.
Higashi, Y., Moribe, H., Takagi, T., Sekido, R., Kawakami, K., Kikutani, H., and Kondoh, H. Impairment of T cell development in *δEF1* mutant mice. 1467.
Hill, A. *See* Galocha, Hill, Barnett, Dolan, Raimondi, Cook, Brunner, McGeoch, and Ploegh.
Hill, A.V.S. *See* Davenport, Smith, Barouch, Reid, Bodnar, Willis, Hunt, and Hill.
Ho, A. *See* Tada, Ho, Matsuyama, and Mak.
Hoang, T. *See* Rajotte, Cadieux, Haman, Wilkes, Clark, Hercus, Woodcock, Lopez, and Hoang.
Hodes, R.J. *See* Palmer, Weng, Levine, June, Lane, and Hodes.
Holdsworth, S.R. *See* Kitching, Holdsworth, Ploplis, Plow, Collen, Carmeliet, and Tipping.
Holmes, N. *See* Münz, Holmes, King, Loke, Colonna, Schild, and Rammensee.
Holtschke, T. *See* Fehr, Schoedon, Odermatt, Holtschke, Schneemann, Bachmann, Mak, Horak, and Zinkernagel.
Hombach, J. *See* Ehl, Hombach, Aichele, Hengartner, and Zinkernagel.
Honeyman, M.C. *See* Harrison, Honeyman, Trembleau, Gregori, Gallazzi, Augstein, Brusic, Hammer, and Adorini.
Honjo, T. *See* Murakami, Nakajima, Yamazaki, Muraguchi, Serikawa, and Honjo.
Horak, I. *See* Fehr, Schoedon, Odermatt, Holtschke, Schneemann, Bachmann, Mak, Horak, and Zinkernagel.
Hori, T. *See* Res, Blom, Hori, Weijer, and Spits.
Horton, M.A. *See* Lee, McGarry, Farmer, Denzler, Larson, Carrigan, Brenneise, Horton, Haczku, Gelfand, Leikauf, and Lee.
Horwood, N.J. *See* Udagawa, Horwood, Elliott, Mackay, Owens, Okamura, Kurimoto, Chambers, Martin, and Gillespie.
Hottelet, M. *See* Utz, Hottelet, Schur, and Anderson.
Howard, R.G. *See* Karras, Wang, Huo, Howard, Frank, and Rothstein.
Hoy, T.G. *See* Darley, Hoy, Baines, Padua, and Burnett.
Hu, Y. *See* Musey, Hu, Eckert, Christensen, Karchmer, and McElrath.
Huang, A. *See* Wu, Guo, Huang, Zheng, and Liu.
Huang, G. *See* Fu, Molina, Matsumoto, Huang, Min, and Chaplin.
Hünig, T. *See* Kerkau, Bacik, Bennink, Yewdell, Hünig, Schimpl, and Schubert.
Hunt, D.F. *See* Davenport, Smith, Barouch, Reid, Bodnar, Willis, Hunt, and Hill.
— *See* Dubey, Hendrickson, Meredith, Siegel, Shabanowitz, Skipper, Engelhard, Hunt, and Schreiber.
Huo, L. *See* Karras, Wang, Huo, Howard, Frank, and Rothstein.

I

Igarashi, K. *See* Tachibana, Nakajima, Sato, Igarashi, Shida, Iizasa, Yoshida, Yoshie, Kishimoto, and Nagasawa.
Iizasa, H. *See* Tachibana, Nakajima, Sato, Igarashi, Shida, Iizasa, Yoshida, Yoshie, Kishimoto, and Nagasawa.
Iliev, A. *See* Spatz, Saenko, Iliev, Jones, Geskin, and Diamond.
Imaoka, K. *See* Yamamoto, Takeda, Yamamoto, Kurazono, Imaoka, Yamamoto, Fujihashi, Noda, Kiyono, and McGhee.
Inazu, T. *See* Yamanashi, Fukuda, Nishizumi, Inazu, Higashi, Kitamura, Ishida, Yamamura, Watanabe, and Yamamoto.
Ingulli, E., Mondino, A., Khoruts, A., and Jenkins, M.K. In vivo detection of dendritic cell antigen presentation to $CD4^+$ T cells. 2133.
Introna, M. *See* Tedesco, Pausa, Nardon, Introna, Mantovani, and Dobrina.
Ishida, T. *See* Yamanashi, Fukuda, Nishizumi, Inazu, Higashi, Kitamura, Ishida, Yamamura, Watanabe, and Yamamoto.
Ishida, Y. *See* Saijo, Park, Ishida, Arase, and Saito.
Israels, S. *See* Shi, Mai, Israels, Browne, Trapani, and Greenberg.
Izui, S. *See* Santiago, Fossati, Jacquet, Müller, Izui, and Reininger.

J

Jackson, M.R. *See* Cai, Kishimoto, Brunmark, Jackson, Peterson, and Sprent.
— *See* Smith, Brunmark, Jackson, and Potter.
Jackson, R.J. *See* Marinaro, Boyaka, Finkelman, Kiyono, Jackson, Jirillo, and McGhee.
Jacquet, C. *See* Santiago, Fossati, Jacquet, Müller, Izui, and Reininger.
Jankovic, M. *See* Papavasiliou, Jankovic, and Nussenzweig.

Janse, C.J. *See* van der Wel, Tomás, Kocken, Malhotra, Janse, Waters, and Thomas.
Jansen, H.T. *See* Tian, Broxmeyer, Fan, Lai, Zhang, Aronica, Cooper, Bigsby, Steinmetz, Engle, Mestek, Pollock, Lehman, Jansen, Ying, Stambrook, Tischfield, and Yu.
Jansen, P.M. *See* van der Poll, Levi, Dentener, Jansen, Coyle, Braxton, Buurman, Hack, ten Cate, and Lowry.
Jaskowiak, N.T. *See* Sarraf, Frederich, Turner, Ma, Jaskowiak, Rivet, Flier, Lowell, Fraker, and Alexander.
Jenkins, M.K. *See* Ingulli, Mondino, Khoruts, and Jenkins.
Jenne, D. *See* Neumann, Schmidt, Cavalié, Jenne, and Wekerle.
Jennings, H.J. *See* Pon, Lussier, Yang, and Jennings.
Jeon, S.H., Kang, M.G., Kim, Y.H., Jin, Y.H., Lee, C., Chung, H.-Y., Kwon, H., Park, S.D., and Seong, R.H. A new mouse gene, *SRG3*, related to the *SWI3* of *Saccharomyces cerevisiae*, is required for apoptosis induced by glucocorticoids in a thymoma cell line. 1827.
Jin, Y.H. *See* Jeon, Kang, Kim, Jin, Lee, Chung, Kwon, Park, and Seong.
Jirillo, E. *See* Marinaro, Boyaka, Finkelman, Kiyono, Jackson, Jirillo, and McGhee.
Jones, L. *See* Spatz, Saenko, Iliev, Jones, Geskin, and Diamond.
Jones, P.P. *See* Conboy, DeKruyff, Tate, Cao, Moore, Umetsu, and Jones.
Jones, T.R. *See* Machold, Wiertz, Jones, and Ploegh.
June, C.H. *See* Palmer, Weng, Levine, June, Lane, and Hodes.
Jung, G. *See* Hemmer, Fleckenstein, Vergelli, Jung, McFarland, Martin, and Wiesmüller.
— *See* Mühlradt, Kieß, Meyer, Süßmuth, and Jung.

K

Kaczmarek, E. *See* Robson, Kaczmarek, Siegel, Candinas, Koziak, Millan, Hancock, and Bach.
Kalinke, U. *See* Fehr, Bachmann, Bucher, Kalinke, Di Padova, Lang, Hengartner, and Zinkernagel.
Kamata, Y. *See* Watarai, Kamata, Kozaki, and Sasakawa.
Kang, A.H. *See* Rosloniec, Brand, Myers, Whittington, Gumanovskaya, Zaller, Woods, Altmann, Stuart, and Kang.
Kang, M.G. *See* Jeon, Kang, Kim, Jin, Lee, Chung, Kwon, Park, and Seong.
Kanwar, S., Bullard, D.C., Hickey, M.J., Smith, C.W., Beaudet, A.L., Wolitzky, B.A., and Kubes, P. The association between α_4-integrin, P-selectin, and E-selectin in an allergic model of inflammation. 1077.
Kappler, J.W. *See* Hamad, Marrack, and Kappler.
— *See* Seibel, Wilson, Kozono, Marrack, and Kappler.
Karchmer, T. *See* Musey, Hu, Eckert, Christensen, Karchmer, and McElrath.
Karjalainen, K. *See* Brocker, Riedinger, and Karjalainen.
Karras, J.G., Wang, Z., Huo, L., Howard, R.G., Frank, D.A., and Rothstein, T.L. Signal transducer and activator of transcription-3 (STAT3) is constitutively activated in normal, self-renewing B-1 cells but only inducibly expressed in conventional B lymphocytes. 1035.
Kärre, K. *See* Carbone, Ruggiero, Terrazzano, Palomba, Manzo, Fontana, Spits, Kärre, and Zappacosta.
Karrer, U., Althage, A., Odermatt, B., Roberts, C.W.M., Korsmeyer, S.J., Miyawaki, S., Hengartner, H., and Zinkernagel, R.M. On the key role of secondary lymphoid organs in antiviral immune responses studied in alymphoplastic (*aly/aly*) and spleenless (*Hox11*$^{-/-}$) mutant mice. 2157.
Kassam, N. *See* Wu, Paxton, Kassam, Ruffing, Rottman, Sullivan, Choe, Sodroski, Newman, Koup, and Mackay.
Katona, I.M. *See* Yamaguchi, Lantz, Oettgen, Katona, Fleming, Miyajima, Kinet, and Galli.
Kawakami, K. *See* Higashi, Moribe, Takagi, Sekido, Kawakami, Kikutani, and Kondoh.
Kaye, J. *See* Shao, Kono, Chen, Rubin, and Kaye.
Keehnen, R.M.J. *See* van der Voort, Taher, Keehnen, Smit, Groenink, and Pals.
Kelsall, B.L. *See* Marth and Kelsall.
Kerkau, T., Bacik, I., Bennink, J.R., Yewdell, J.W., Hünig, T., Schimpl, A., and Schubert, U. The human immunodeficiency virus type 1 (HIV-1) Vpu protein interferes with an early step in the biosynthesis of major histocompatibility complex (MHC) class I molecules. 1295.
Kersh, G.J. *See* Reinhold, Lindberg, Kersh, Allen, and Brown.
Kessler, B.M., Bassanini, P., Cerottini, J.-C., and Luescher, I.F. Effects of epitope modification on T cell receptor–ligand binding and antigen recognition by seven H-2K^d–restricted cytotoxic T lymphocyte clones specific for a photoreactive peptide derivative. 629.
Khoruts, A. *See* Ingulli, Mondino, Khoruts, and Jenkins.
Kiener, P.A., Davis, P.M., Starling, G.C., Mehlin, C., Klebanoff, S.J., Ledbetter, J.A., and Liles, W.C. Differential induction of apoptosis by Fas–Fas ligand interactions in human monocytes and macrophages. 1511.
— *See* Starling, Bajorath, Emswiler, Ledbetter, Aruffo, and Kiener.
Kieß, M. *See* Mühlradt, Kieß, Meyer, Süßmuth, and Jung.
Kikutani, H. *See* Higashi, Moribe, Takagi, Sekido, Kawakami, Kikutani, and Kondoh.
Kim, Y.H. *See* Jeon, Kang, Kim, Jin, Lee, Chung, Kwon, Park, and Seong.
Kinet, J.-P. *See* Yamaguchi, Lantz, Oettgen, Katona, Fleming, Miyajima, Kinet, and Galli.
King, A. *See* Münz, Holmes, King, Loke, Colonna, Schild, and Rammensee.
Kipps, T.J. *See* Rassenti and Kipps.
Kishimoto, H., and Sprent, J. Negative selection in the thymus includes semimature T cells. 263.
— *See* Cai, Kishimoto, Brunmark, Jackson, Peterson, and Sprent.
Kishimoto, T. *See* Tachibana, Nakajima, Sato, Igarashi, Shida, Iizasa, Yoshida, Yoshie, Kishimoto, and Nagasawa.
Kitamura, D. *See* Yamanashi, Fukuda, Nishizumi, Inazu, Higashi, Kitamura, Ishida, Yamamura, Watanabe, and Yamamoto.
Kitching, A.R., Holdsworth, S.R., Ploplis, V.A., Plow, E.F., Collen, D., Carmeliet, P., and Tipping, P.G. Plasminogen and plasminogen activators protect against renal injury in crescentic glomerulonephritis. 963.
Kiyono, H. *See* Marinaro, Boyaka, Finkelman, Kiyono, Jackson, Jirillo, and McGhee.
— *See* Yamamoto, Takeda, Yamamoto, Kurazono, Imaoka, Yamamoto, Fujihashi, Noda, Kiyono, and McGhee.
Klebanoff, S.J. *See* Kiener, Davis, Starling, Mehlin, Klebanoff, Ledbetter, and Liles.
Knoll, J.H.M. *See* Douhan, Lieberson, Knoll, Zhou, and Glimcher.
Kobzik, L. *See* Adler, Beland, Del-Pan, Kobzik, Brewer, Martin, and Rimm.
Kocken, C.H.M. *See* van der Wel, Tomás, Kocken, Malhotra, Janse, Waters, and Thomas.
Kodukula, P. *See* Sciammas, Kodukula, Tang, Hendricks, and Bluestone.
Kohler, H. *See* Barthlott, Kohler, and Eichmann.
Koller, B.H. *See* Byrum, Goulet, Griffiths, and Koller.
— *See* Griffiths, Smith, Roach, Stock, Stam, Milici, Scampoli, Eskra, Byrum, Koller, and McNeish.
Kollias, G. *See* Cope, Liblau, Yang, Congia, Laudanna, Schreiber, Probert, Kollias, and McDevitt.
Kondoh, H. *See* Higashi, Moribe, Takagi, Sekido, Kawakami, Kikutani, and Kondoh.
Kong, Y.-Y. *See* Speiser, Lee, Wong, Arron, Santana, Kong, Ohashi, and Choi.
Kono, D.H. *See* Shao, Kono, Chen, Rubin, and Kaye.
Kopf, M. *See* Tsuyuki, Tsuyuki, Einsle, Kopf, and Coyle.
Korsgren, M., Erjefält, J.S., Korsgren, O., Sundler, F., and Persson, C.G.A. Allergic eosinophil-rich inflammation develops in lungs and airways of B cell–deficient mice. 885.
Korsgren, O. *See* Korsgren, Erjefält, Korsgren, Sundler, and Persson.
Korsmeyer, S.J. *See* Karrer, Althage, Odermatt, Roberts, Korsmeyer, Miyawaki, Hengartner, and Zinkernagel.
Koup, R.A. *See* Wu, Paxton, Kassam, Ruffing, Rottman, Sullivan, Choe, Sodroski, Newman, Koup, and Mackay.
Kozaki, S. *See* Watarai, Kamata, Kozaki, and Sasakawa.
Koziak, K. *See* Robson, Kaczmarek, Siegel, Candinas, Koziak, Millan, Hancock, and Bach.

Kozono, H. *See* Seibel, Wilson, Kozono, Marrack, and Kappler.
Kraehenbuhl, J.-P. *See* Velin, Fotopoulos, Luthi, and Kraehenbuhl.
Krangel, M.S. *See* Lauzurica, Zhong, Krangel, and Roberts.
— *See* Roberts, Lauzurica, and Krangel.
Kreider, B.L. *See* Patel, Kreider, Li, Li, Leung, Salcedo, Nardelli, Pippalla, Gentz, Thotakura, Parmelee, Gentz, and Garotta.
Krishna, M., and Varki, A. 9-*O*-acetylation of sialomucins: a novel marker of murine CD4 T cells that is regulated during maturation and activation. 1997.
Kronenberg, M. *See* Hagenbaugh, Sharma, Dubinett, Wei, Aranda, Cheroutre, Fowell, Binder, Tsao, Locksley, Moore, and Kronenberg.
Kubes, P. *See* Kanwar, Bullard, Hickey, Smith, Beaudet, Wolitzky, and Kubes.
Kudo, S., Matsuno, K., Ezaki, T., and Ogawa, M. A novel migration pathway for rat dendritic cells from the blood: hepatic sinusoids–lymph translocation. 777.
Kühnle, S. *See* Leist, Single, Castoldi, Kühnle, and Nicotera.
Kumar, A. *See* Steven, Annels, Kumar, Leese, Kurilla, and Rickinson.
Kumar, V., Aziz, F., Sercarz, E., and Miller, A. Regulatory T cells specific for the same framework 3 region of the Vβ8.2 chain are involved in the control of collagen II–induced arthritis and experimental autoimmune encephalomyelitis. 1725.
Kurazono, H. *See* Yamamoto, Takeda, Yamamoto, Kurazono, Imaoka, Yamamoto, Fujihashi, Noda, Kiyono, and McGhee.
Kurilla, M.G. *See* Steven, Annels, Kumar, Leese, Kurilla, and Rickinson.
Kurimoto, M. *See* Udagawa, Horwood, Elliott, Mackay, Owens, Okamura, Kurimoto, Chambers, Martin, and Gillespie.
Kurosaki, T. *See* Wu, Zhao, Kurosaki, and Weiss.
Kurup, V.P. *See* Grünig, Corry, Leach, Seymour, Kurup, and Rennick.
Kwon, H. *See* Jeon, Kang, Kim, Jin, Lee, Chung, Kwon, Park, and Seong.
Kwon-Chung, J. *See* Gao, Wynn, Chang, Lee, Broxmeyer, Cooper, Tiffany, Westphal, Kwon-Chung, and Murphy.

L

Labadie, C. *See* Theobald, Biggs, Hernández, Lustgarten, Labadie, and Sherman.
Lai, Z. *See* Tian, Broxmeyer, Fan, Lai, Zhang, Aronica, Cooper, Bigsby, Steinmetz, Engle, Mestek, Pollock, Lehman, Jansen, Ying, Stambrook, Tischfield, and Yu.
Lalloo, D.G. *See* Goulder, Sewell, Lalloo, Price, Whelan, Evans, Taylor, Luzzi, Giangrande, Phillips, and McMichael.
Lan, H.Y., Bacher, M., Yang, N., Mu, W., Nikolic-Paterson, D.J., Metz, C., Meinhardt, A., Bucala, R., and Atkins, R.C. The pathogenic role of macrophage migration inhibitory factor in immunologically induced kidney disease in the rat. 1455.
Landau, N.R. *See* Connor, Sheridan, Ceradini, Choe, and Landau.
Lane, H.C. *See* Palmer, Weng, Levine, June, Lane, and Hodes.
Lang, A.B. *See* Fehr, Bachmann, Bucher, Kalinke, Di Padova, Lang, Hengartner, and Zinkernagel.
Langen, H. *See* Forssmann, Uguccioni, Loetscher, Dahinden, Langen, Thelen, and Baggiolini.
Lanoue, A., Bona, C., von Boehmer, H., and Sarukhan, A. Conditions that induce tolerance in mature $CD4^+$ T cells. 405.
Lantz, C.S. *See* Yamaguchi, Lantz, Oettgen, Katona, Fleming, Miyajima, Kinet, and Galli.
Lantz, O., Sharara, L.I., Tilloy, F., Andersson, Å., and DiSanto, J.P. Lineage relationships and differentiation of natural killer (NK) T cells: intrathymic selection and interleukin (IL)-4 production in the absence of NKR-P1 and Ly49 molecules. 1395.
Lanzavecchia, A. Understanding the mechanisms of sustained signaling and T cell activation. 1717.
— *See* Cella, Döhring, Samaridis, Dessing, Brockhaus, Lanzavecchia, and Colonna.
— *See* Valitutti, Müller, Salio, and Lanzavecchia.
Larson, K.A. *See* Lee, McGarry, Farmer, Denzler, Larson, Carrigan, Brenneise, Horton, Haczku, Gelfand, Leikauf, and Lee.
Laudanna, C. *See* Cope, Liblau, Yang, Congia, Laudanna, Schreiber, Probert, Kollias, and McDevitt.
Lauzurica, P., Zhong, X.-P., Krangel, M.S., and Roberts, J.L. Regulation of T cell receptor δ gene rearrangement by CBF/PEBP2. 1193.
— *See* Roberts, Lauzurica, and Krangel.
Lavi, E. *See* Frei, Eugster, Bopst, Constantinescu, Lavi, and Fontana.
Lazdins, J.K., Grell, M., Walker, M.R., Woods-Cook, K., Scheurich, P., and Pfizenmaier, K. Membrane tumor necrosis factor (TNF) induced cooperative signaling of TNFR60 and TNFR80 favors induction of cell death rather than virus production in HIV-infected T cells. 81.
Leach, M.W. *See* Grünig, Corry, Leach, Seymour, Kurup, and Rennick.
Lebecque, S., de Bouteiller, O., Arpin, C., Banchereau, J., and Liu, Y.-J. Germinal center founder cells display propensity for apoptosis before onset of somatic mutation. 563.
— *See* Liu, Xu, de Bouteiller, Parham, Grouard, Djossou, de Saint-Vis, Lebecque, Banchereau, and Moore.
Ledbetter, J.A. *See* Kiener, Davis, Starling, Mehlin, Klebanoff, Ledbetter, and Liles.
— *See* Starling, Bajorath, Emswiler, Ledbetter, Aruffo, and Kiener.
Leder, P. *See* Grimm and Leder.
— *See* Rothenberg, MacLean, Pearlman, Luster, and Leder.
Lee, C. *See* Jeon, Kang, Kim, Jin, Lee, Chung, Kwon, Park, and Seong.
Lee, E.J. *See* Gao, Wynn, Chang, Lee, Broxmeyer, Cooper, Tiffany, Westphal, Kwon-Chung, and Murphy.
Lee, J.J., McGarry, M.P., Farmer, S.C., Denzler, K.L., Larson, K.A., Carrigan, P.E., Brenneise, I.E., Horton, M.A., Haczku, A., Gelfand, E.W., Leikauf, G.D., and Lee, N.A. Interleukin-5 expression in the lung epithelium of transgenic mice leads to pulmonary changes pathognomonic of asthma. 2143.
Lee, N.A. *See* Lee, McGarry, Farmer, Denzler, Larson, Carrigan, Brenneise, Horton, Haczku, Gelfand, Leikauf, and Lee.
Lee, S.Y., Lee, S.Y., and Choi, Y. TRAF-interacting protein (TRIP): a novel component of the tumor necrosis factor receptor (TNFR)- and CD30-TRAF signaling complexes that inhibits TRAF2-mediated NF-κB activation. 1275.
— *See* Speiser, Lee, Wong, Arron, Santana, Kong, Ohashi, and Choi.
Lees, R.K. *See* van Meerwijk, Marguerat, Lees, Germain, Fowlkes, and MacDonald.
Leese, A.M. *See* Steven, Annels, Kumar, Leese, Kurilla, and Rickinson.
Legge, K.L., Min, B., Potter, N.T., and Zaghouani, H. Presentation of a T cell receptor antagonist peptide by immunoglobulins ablates activation of T cells by a synthetic peptide or proteins requiring endocytic processing. 1043. Correction. 1393.
Le Gros, G. *See* Harris, Peach, Naemura, Linsley, Le Gros, and Ronchese.
Lehman, M.N. *See* Tian, Broxmeyer, Fan, Lai, Zhang, Aronica, Cooper, Bigsby, Steinmetz, Engle, Mestek, Pollock, Lehman, Jansen, Ying, Stambrook, Tischfield, and Yu.
Leibson, P. *See* Badley, Dockrell, Simpson, Schut, Lynch, Leibson, and Paya.
Leikauf, G.D. *See* Lee, McGarry, Farmer, Denzler, Larson, Carrigan, Brenneise, Horton, Haczku, Gelfand, Leikauf, and Lee.
Leist, M., Single, B., Castoldi, A.F., Kühnle, S., and Nicotera, P. Intracellular adenosine triphosphate (ATP) concentration: a switch in the decision between apoptosis and necrosis. 1481.
Leitner, G. *See* Strunk, Egger, Leitner, Hanau, and Stingl.
Lemonnier, F.A. *See* Pascolo, Bervas, Ure, Smith, Lemonnier, and Pérarnau.
Leonard, D. *See* Li, Leonard, and Wilkinson.
Leonard, W.J. *See* Nakajima, Shores, Noguchi, and Leonard.
Leung, K. *See* Patel, Kreider, Li, Li, Leung, Salcedo, Nardelli, Pippalla, Gentz, Thotakura, Parmelee, Gentz, and Garotta.
Lev, S. *See* Qian, Lev, van Oers, Dikic, Schlessinger, and Weiss.
Levi, M. *See* van der Poll, Levi, Dentener, Jansen, Coyle, Braxton, Buurman, Hack, ten Cate, and Lowry.
Levine, B.L. *See* Palmer, Weng, Levine, June, Lane, and Hodes.
Leviten, D. *See* Godiska, Chantry, Raport, Sozzani, Allavena, Leviten, Mantovani, and Gray.
Levy, S. *See* Maecker and Levy.
Li, H. *See* Patel, Kreider, Li, Li, Leung, Salcedo, Nardelli, Pippalla, Gentz, Thotakura, Parmelee, Gentz, and Garotta.
Li, L.L. *See* Morgenstern, Gifford, Li, Doerschuk, and Dinauer.

Li, S., Leonard, D., and Wilkinson, M.F. T cell receptor (TCR) mini-gene mRNA expression regulated by nonsense codons: a nuclear-associated translation-like mechanism. 985. Correction. 1883.
Li, W. *See* Friedlander, Gagliardini, Hara, Fink, Li, MacDonald, Fishman, Greenberg, Moskowitz, and Yuan.
Li, Y. *See* Bloom, Perry-Lalley, Robbins, Li, El-Gamil, Rosenberg, and Yang.
— *See* Patel, Kreider, Li, Li, Leung, Salcedo, Nardelli, Pippalla, Gentz, Thotakura, Parmelee, Gentz, and Garotta.
Liao, F., Ali, J., Greene, T., and Muller, W.A. Soluble domain 1 of platelet–endothelial cell adhesion molecule (PECAM) is sufficient to block transendothelial migration in vitro and in vivo. 1349.
—, Alkhatib, G., Peden, K.W.C., Sharma, G., Berger, E.A., and Farber, J.M. STRL33, a novel chemokine receptor–like protein, functions as a fusion cofactor for both macrophage-tropic and T cell line–tropic HIV-1. 2015.
Liblau, R.S. *See* Cope, Liblau, Yang, Congia, Laudanna, Schreiber, Probert, Kollias, and McDevitt.
Lieberson, R. *See* Douhan, Lieberson, Knoll, Zhou, and Glimcher.
Liles, W.C. *See* Kiener, Davis, Starling, Mehlin, Klebanoff, Ledbetter, and Liles.
Lin, S.-Y., Ardouin, L., Gillet, A., Malissen, M., and Malissen, B. The single positive T cells found in CD3-$\zeta/\eta^{-/-}$ mice overtly react with self–major histocompatibility complex molecules upon restoration of normal surface density of T cell receptor–CD3 complex. 707.
Lindberg, F.P. *See* Reinhold, Lindberg, Kersh, Allen, and Brown.
Linsley, P. *See* van der Merwe, Bodian, Daenke, Linsley, and Davis.
Linsley, P.S. *See* Harris, Peach, Naemura, Linsley, Le Gros, and Ronchese.
Liu, Y., Wenger, R.H., Zhao, M., and Nielsen, P.J. Distinct costimulatory molecules are required for the induction of effector and memory cytotoxic T lymphocytes. 251.
— *See* Wu, Guo, Huang, Zheng, and Liu.
Liu, Y.-J., Xu, J., de Bouteiller, O., Parham, C.L., Grouard, G., Djossou, O., de Saint-Vis, B., Lebecque, S., Banchereau, J., and Moore, K.W. Follicular dendritic cells specifically express the long CR2/CD21 isoform. 165.
— *See* Grouard, Rissoan, Filgueira, Durand, Banchereau, and Liu.
— *See* Lebecque, de Bouteiller, Arpin, Banchereau, and Liu.
Lloyd, C.M., Minto, A.W., Dorf, M.E., Proudfoot, A., Wells, T.N.C., Salant, D.J., and Gutierrez-Ramos, J.-C. RANTES and monocyte chemoattractant protein–1 (MCP-1) play an important role in the inflammatory phase of crescentic nephritis, but only MCP-1 is involved in crescent formation and interstitial fibrosis. 1371.
Locksley, R.M. *See* Brown, Swier, Moskowitz, Naujokas, Locksley, and Reiner.
— *See* Corry, Folkesson, Warnock, Erle, Matthay, Wiener-Kronish, and Locksley.
— *See* Hagenbaugh, Sharma, Dubinett, Wei, Aranda, Cheroutre, Fowell, Binder, Tsao, Locksley, Moore, and Kronenberg.
Loetscher, P. *See* Forssmann, Uguccioni, Loetscher, Dahinden, Langen, Thelen, and Baggiolini.
Loke, Y.W. *See* Münz, Holmes, King, Loke, Colonna, Schild, and Rammensee.
Long, E.O. *See* Rajagopalan and Long.
Lopez, A. *See* Rajotte, Cadieux, Haman, Wilkes, Clark, Hercus, Woodcock, Lopez, and Hoang.
Loppnow, H. *See* Schönbeck, Herzberg, Petersen, Wohlenberg, Gerdes, Flad, and Loppnow.
Lorens, J.B. *See* Shaw, Lorens, Dhawan, DalCanto, Tse, Tran, Bonpane, Eswaran, Brocke, Sarvetnick, Steinman, Nolan, and Fathman.
Lotter, H., Zhang, T., Seydel, K.B., Stanley, S.L., Jr., and Tannich, E. Identification of an epitope on the *Entamoeba histolytica* 170-kD lectin conferring antibody-mediated protection against invasive amebiasis. 1793.
Love, P.E. *See* Shores, Tran, Grinberg, Sommers, Shen, and Love.
Lowell, B.B. *See* Sarraf, Frederich, Turner, Ma, Jaskowiak, Rivet, Flier, Lowell, Fraker, and Alexander.
Lowell, C.A. *See* Meng and Lowell.
Lowry, S.F. *See* van der Poll, Levi, Dentener, Jansen, Coyle, Braxton, Buurman, Hack, ten Cate, and Lowry.
Luescher, I.F. *See* Kessler, Bassanini, Cerottini, and Luescher.
Luini, W. *See* Sica, Saccani, Borsatti, Power, Wells, Luini, Polentarutti, Sozzani, and Mantovani.
Lussier, M. *See* Pon, Lussier, Yang, and Jennings.
Lusso, P. *See* Verani, Scarlatti, Comar, Tresoldi, Polo, Giacca, Lusso, Siccardi, and Vercelli.
Luster, A.D. *See* Rothenberg, MacLean, Pearlman, Luster, and Leder.
— *See* Sarafi, Garcia-Zepeda, MacLean, Charo, and Luster.
Lustgarten, J. *See* Theobald, Biggs, Hernández, Lustgarten, Labadie, and Sherman.
Luther, S.A., Gulbranson-Judge, A., Acha-Orbea, H., and MacLennan, I.C.M. Viral superantigen drives extrafollicular and follicular B cell differentiation leading to virus-specific antibody production. 551.
Luthi, F. *See* Velin, Fotopoulos, Luthi, and Kraehenbuhl.
Lützelschwab, C., Pejler, G., Aveskogh, M., and Hellman, L. Secretory granule proteases in rat mast cells. Cloning of 10 different serine proteases and a carboxypeptidase A from various rat mast cell populations. 13.
Luzuriaga, K. *See* Pikora, Sullivan, Panicali, and Luzuriaga.
Luzzi, G. *See* Goulder, Sewell, Lalloo, Price, Whelan, Evans, Taylor, Luzzi, Giangrande, Phillips, and McMichael.
Lynch, D.H. *See* Badley, Dockrell, Simpson, Schut, Lynch, Leibson, and Paya.

M

Ma, G. *See* Sarraf, Frederich, Turner, Ma, Jaskowiak, Rivet, Flier, Lowell, Fraker, and Alexander.
MacDonald, G. *See* Friedlander, Gagliardini, Hara, Fink, Li, MacDonald, Fishman, Greenberg, Moskowitz, and Yuan.
MacDonald, H.R. *See* van Meerwijk, Marguerat, Lees, Germain, Fowlkes, and MacDonald.
Machold, R.P., Wiertz, E.J.H.J., Jones, T.R., and Ploegh, H.L. The HCMV gene products US11 and US2 differ in their ability to attack allelic forms of murine major histocompatibility complex (MHC) class I heavy chains. 363.
Mackay, A. *See* Udagawa, Horwood, Elliott, Mackay, Owens, Okamura, Kurimoto, Chambers, Martin, and Gillespie.
Mackay, C.R. *See* Wu, Paxton, Kassam, Ruffing, Rottman, Sullivan, Choe, Sodroski, Newman, Koup, and Mackay.
MacLean, J.A. *See* Rothenberg, MacLean, Pearlman, Luster, and Leder.
— *See* Sarafi, Garcia-Zepeda, MacLean, Charo, and Luster.
MacLennan, I.C.M. *See* Luther, Gulbranson-Judge, Acha-Orbea, and MacLennan.
Maddox, J.F. *See* Takano, Fiore, Maddox, Brady, Petasis, and Serhan.
Madrenas, J., Chau, L.A., Smith, J., Bluestone, J.A., and Germain, R.N. The efficiency of CD4 recruitment to ligand-engaged TCR controls the agonist/partial agonist properties of peptide–MHC molecule ligands. 219.
Maecker, H.T., and Levy, S. Normal lymphocyte development but delayed humoral immune response in CD81-null mice. 1505.
Magram, J. *See* Scharton-Kersten, Yap, Magram, and Sher.
Mai, S. *See* Shi, Mai, Israels, Browne, Trapani, and Greenberg.
Mak, T.W. *See* Fehr, Schoedon, Odermatt, Holtschke, Schneemann, Bachmann, Mak, Horak, and Zinkernagel.
— *See* Suzuki, Duncan, Takimoto, and Mak.
— *See* Tada, Ho, Matsuyama, and Mak.
Malhotra, P. *See* van der Wel, Tomás, Kocken, Malhotra, Janse, Waters, and Thomas.
Malik, S. *See* Sawchuk, Weis-Garcia, Malik, Besmer, Bustin, Nussenzweig, and Cortes.
Malissen, B. *See* Lin, Ardouin, Gillet, Malissen, and Malissen.
Malissen, M. *See* Lin, Ardouin, Gillet, Malissen, and Malissen.
— *See* Norment, Forbush, Nguyen, Malissen, and Perlmutter.
Manser, T. *See* Tumas-Brundage and Manser.
Mantovani, A. *See* Godiska, Chantry, Raport, Sozzani, Allavena, Leviten, Mantovani, and Gray.
— *See* Sica, Saccani, Borsatti, Power, Wells, Luini, Polentarutti, Sozzani, and Mantovani.

— *See* Tedesco, Pausa, Nardon, Introna, Mantovani, and Dobrina.
Manzo, C. *See* Carbone, Ruggiero, Terrazzano, Palomba, Manzo, Fontana, Spits, Kärre, and Zappacosta.
Marguerat, S. *See* van Meerwijk, Marguerat, Lees, Germain, Fowlkes, and MacDonald.
Mariani, F. *See* Bürk, Carena, Donda, Mariani, Mori, and De Libero.
Marinaro, M., Boyaka, P.N., Finkelman, F.D., Kiyono, H., Jackson, R.J., Jirillo, E., and McGhee, J.R. Oral but not parenteral interleukin (IL)-12 redirects T helper 2 (Th2)-type responses to an oral vaccine without altering mucosal IgA responses. 415.
Marrack, P. *See* Hamad, Marrack, and Kappler.
— *See* Seibel, Wilson, Kozono, Marrack, and Kappler.
Mårtensson, I.-L., Melchers, F., and Winkler, T.H. A transgenic marker for mouse B lymphoid precursors. 653.
Marth, T., and Kelsall, B.L. Regulation of interleukin-12 by complement receptor 3 signaling. 1987.
Martin, D., Cadieux, N., Hamel, J., and Brodeur, B.R. Highly conserved *Neisseria meningitidis* surface protein confers protection against experimental infection. 1173.
Martin, R. *See* Hemmer, Fleckenstein, Vergelli, Jung, McFarland, Martin, and Wiesmüller.
Martin, S. *See* Preckel, Grimm, Martin, and Weltzien.
Martin, T.J. *See* Udagawa, Horwood, Elliott, Mackay, Owens, Okamura, Kurimoto, Chambers, Martin, and Gillespie.
Martin, T.R. *See* Adler, Beland, Del-Pan, Kobzik, Brewer, Martin, and Rimm.
Massacrier, C. *See* Dubois, Vanbervliet, Fayette, Massacrier, Van Kooten, Brière, Banchereau, and Caux.
Matsumoto, M. *See* Fu, Molina, Matsumoto, Huang, Min, and Chaplin.
Matsuno, K. *See* Kudo, Matsuno, Ezaki, and Ogawa.
Matsuyama, T. *See* Tada, Ho, Matsuyama, and Mak.
Matthay, M.A. *See* Corry, Folkesson, Warnock, Erle, Matthay, Wiener-Kronish, and Locksley.
Mavaddat, N. *See* Crowley, Reich, Mavaddat, Altman, and Chien.
Mayo, M.W. *See* Cogswell, Mayo, and Baldwin.
Mazel, S. *See* Tourigny, Mazel, Burtrum, and Petrie.
McAvoy, J.W. *See* Hales, Chamberlain, Murphy, and McAvoy.
McConnell, H.M. *See* Wülfing, Rabinowitz, Beeson, Sjaastad, McConnell, and Davis.
McDevitt, H.O. *See* Cope, Liblau, Yang, Congia, Laudanna, Schreiber, Probert, Kollias, and McDevitt.
— *See* Pearson, van Ewijk, and McDevitt.
McElrath, M.J. *See* Musey, Hu, Eckert, Christensen, Karchmer, and McElrath.
McEvoy, L.M., Sun, H., Frelinger, J.G., and Butcher, E.C. Anti-CD43 inhibition of T cell homing. 1493.
—, Sun, H., Tsao, P.S., Cooke, J.P., Berliner, J.A., and Butcher, E.C. Novel vascular molecule involved in monocyte adhesion to aortic endothelium in models of atherogenesis. 2069.
McFarland, H. *See* Hemmer, Fleckenstein, Vergelli, Jung, McFarland, Martin, and Wiesmüller.
McGarry, M.P. *See* Lee, McGarry, Farmer, Denzler, Larson, Carrigan, Brenneise, Horton, Haczku, Gelfand, Leikauf, and Lee.
McGeoch, D.J. *See* Galocha, Hill, Barnett, Dolan, Raimondi, Cook, Brunner, McGeoch, and Ploegh.
McGhee, J.R. *See* Marinaro, Boyaka, Finkelman, Kiyono, Jackson, Jirillo, and McGhee.
— *See* Yamamoto, Takeda, Yamamoto, Kurazono, Imaoka, Yamamoto, Fujihashi, Noda, Kiyono, and McGhee.
McMichael, A.J. *See* Goulder, Sewell, Lalloo, Price, Whelan, Evans, Taylor, Luzzi, Giangrande, Phillips, and McMichael.
McNeish, J.D. *See* Griffiths, Smith, Roach, Stock, Stam, Milici, Scampoli, Eskra, Byrum, Koller, and McNeish.
Medina-Marino, A. *See* Chen, Grunert, Medina-Marino, and Gotschlich.
Mehlin, C. *See* Kiener, Davis, Starling, Mehlin, Klebanoff, Ledbetter, and Liles.
Meinhardt, A. *See* Lan, Bacher, Yang, Mu, Nikolic-Paterson, Metz, Meinhardt, Bucala, and Atkins.
Melchers, F. *See* Mårtensson, Melchers, and Winkler.
Meng, F., and Lowell, C.A. Lipopolysaccharide (LPS)-induced macrophage activation and signal transduction in the absence of Src-family kinases Hck, Fgr, and Lyn. 1661.
Meredith, S.C. *See* Dubey, Hendrickson, Meredith, Siegel, Shabanowitz, Skipper, Engelhard, Hunt, and Schreiber.
Messersmith, W. *See* Bieganowska, Ausubel, Modabber, Slovik, Messersmith, and Hafler.
Mestek, A. *See* Tian, Broxmeyer, Fan, Lai, Zhang, Aronica, Cooper, Bigsby, Steinmetz, Engle, Mestek, Pollock, Lehman, Jansen, Ying, Stambrook, Tischfield, and Yu.
Metz, C. *See* Lan, Bacher, Yang, Mu, Nikolic-Paterson, Metz, Meinhardt, Bucala, and Atkins.
Meyer, H. *See* Mühlradt, Kieß, Meyer, Süßmuth, and Jung.
Meyer zum Büschenfelde, K.-H. *See* Peters, Schirmacher, Goldschmitt, Odenthal, Peschel, Fattori, Ciliberto, Dienes, Meyer zum Büschenfelde, and Rose-John.
Mikheeva, T. *See* Bennett, Zatsepina, Zamai, Azzoni, Mikheeva, and Perussia.
Milici, A.J. *See* Griffiths, Smith, Roach, Stock, Stam, Milici, Scampoli, Eskra, Byrum, Koller, and McNeish.
Millan, M. *See* Robson, Kaczmarek, Siegel, Candinas, Koziak, Millan, Hancock, and Bach.
Miller, A. *See* Kumar, Aziz, Sercarz, and Miller.
Miller, A.H. *See* Ruzek, Miller, Opal, Pearce, and Biron.
Min, B. *See* Legge, Min, Potter, and Zaghouani.
Min, J. *See* Fu, Molina, Matsumoto, Huang, Min, and Chaplin.
Minto, A.W. *See* Lloyd, Minto, Dorf, Proudfoot, Wells, Salant, and Gutierrez-Ramos.
Miyajima, I. *See* Yamaguchi, Lantz, Oettgen, Katona, Fleming, Miyajima, Kinet, and Galli.
Miyawaki, S. *See* Karrer, Althage, Odermatt, Roberts, Korsmeyer, Miyawaki, Hengartner, and Zinkernagel.
Modabber, Y. *See* Bieganowska, Ausubel, Modabber, Slovik, Messersmith, and Hafler.
Molina, H. *See* Fu, Molina, Matsumoto, Huang, Min, and Chaplin.
Moll, T. *See* Borges, Tietz, Steegmaier, Moll, Hallmann, Hamann, and Vestweber.
Mondino, A. *See* Ingulli, Mondino, Khoruts, and Jenkins.
Mondragon, M.O. *See* Das, Mondragon, Tao, and Norin.
Moore, K.W. *See* Hagenbaugh, Sharma, Dubinett, Wei, Aranda, Cheroutre, Fowell, Binder, Tsao, Locksley, Moore, and Kronenberg.
— *See* Liu, Xu, de Bouteiller, Parham, Grouard, Djossou, de Saint-Vis, Lebecque, Banchereau, and Moore.
Moore, T.A. *See* Conboy, DeKruyff, Tate, Cao, Moore, Umetsu, and Jones.
Mora, A.L. *See* Boothby, Mora, Scherer, Brockman, and Ballard.
Morgan, B.P. *See* Bodian, Davis, Morgan, and Rushmere.
Morgenstern, D.E., Gifford, M.A.C., Li, L.L., Doerschuk, C.M., and Dinauer, M.C. Absence of respiratory burst in X-linked chronic granulomatous disease mice leads to abnormalities in both host defense and inflammatory response to *Aspergillus fumigatus*. 207.
Mori, L. *See* Bürk, Carena, Donda, Mariani, Mori, and De Libero.
Moribe, H. *See* Higashi, Moribe, Takagi, Sekido, Kawakami, Kikutani, and Kondoh.
Moskowitz, M.A. *See* Friedlander, Gagliardini, Hara, Fink, Li, MacDonald, Fishman, Greenberg, Moskowitz, and Yuan.
Moskowitz, N.H. *See* Brown, Swier, Moskowitz, Naujokas, Locksley, and Reiner.
Mosser, D.M. *See* Sutterwala, Noel, Clynes, and Mosser.
Moudgil, K.D., Chang, T.T., Eradat, H., Chen, A.M., Gupta, R.S., Brahn, E., and Sercarz, E.E. Diversification of T cell responses to carboxy-terminal determinants within the 65-kD heat-shock protein is involved in regulation of autoimmune arthritis. 1307.
Mu, W. *See* Lan, Bacher, Yang, Mu, Nikolic-Paterson, Metz, Meinhardt, Bucala, and Atkins.
Mühlradt, P.F., Kieß, M., Meyer, H., Süßmuth, R., and Jung, G. Isolation, structure elucidation, and synthesis of a macrophage stimulatory lipopeptide from *Mycoplasma fermentans* acting at picomolar concentration. 1951.
Müller, S. *See* Valitutti, Müller, Salio, and Lanzavecchia.
Müller, W. *See* Santiago, Fossati, Jacquet, Müller, Izui, and Reininger.
Muller, W.A. *See* Liao, Ali, Greene, and Muller.

Münz, C., Holmes, N., King, A., Loke, Y.W., Colonna, M., Schild, H., and Rammensee, H.-G. Human histocompatibility leukocyte antigen (HLA)-G molecules inhibit NKAT3 expressing natural killer cells. 385.
Muraguchi, T. *See* Murakami, Nakajima, Yamazaki, Muraguchi, Serikawa, and Honjo.
Murakami, M., Nakajima, K., Yamazaki, K.-i., Muraguchi, T., Serikawa, T., and Honjo, T. Effects of breeding environments on generation and activation of autoreactive B-1 cells in anti-red blood cell autoantibody transgenic mice. 791.
Murphy, C.R. *See* Hales, Chamberlain, Murphy, and McAvoy.
Murphy, K.M. *See* Szabo, Dighe, Gubler, and Murphy.
Murphy, P.M. *See* Gao, Wynn, Chang, Lee, Broxmeyer, Cooper, Tiffany, Westphal, Kwon-Chung, and Murphy.
Murray, H.W., Hariprashad, J., and Coffman, R.L. Behavior of visceral *Leishmania donovani* in an experimentally induced T helper cell 2 (Th2)-associated response model. 867.
— *See* Taylor and Murray.
Musey, L., Hu, Y., Eckert, L., Christensen, M., Karchmer, T., and McElrath, M.J. HIV-1 induces cytotoxic T lymphocytes in the cervix of infected women. 293.
Myers, L.K. *See* Rosloniec, Brand, Myers, Whittington, Gumanovskaya, Zaller, Woods, Altmann, Stuart, and Kang.

N

Nabholz, M. *See* Serdobova, Pla, Reichenbach, Sperisen, Ghysdael, Wilson, Freeman, and Nabholz.
Naemura, J. *See* Harris, Peach, Naemura, Linsley, Le Gros, and Ronchese.
Nagasawa, T. *See* Tachibana, Nakajima, Sato, Igarashi, Shida, Iizasa, Yoshida, Yoshie, Kishimoto, and Nagasawa.
Nakajima, H., Shores, E.W., Noguchi, M., and Leonard, W.J. The common cytokine receptor γ chain plays an essential role in regulating lymphoid homeostasis. 189.
Nakajima, K. *See* Murakami, Nakajima, Yamazaki, Muraguchi, Serikawa, and Honjo.
Nakajima, T. *See* Tachibana, Nakajima, Sato, Igarashi, Shida, Iizasa, Yoshida, Yoshie, Kishimoto, and Nagasawa.
Nakamura, M.C., Niemi, E.C., Fisher, M.J., Shultz, L.D., Seaman, W.E., and Ryan, J.C. Mouse Ly-49A interrupts early signaling events in natural killer cell cytotoxicity and functionally associates with the SHP-1 tyrosine phosphatase. 673.
Nakamura, T. *See* Rincón, Anguita, Nakamura, Fikrig, and Flavell.
Nardelli, B. *See* Patel, Kreider, Li, Li, Leung, Salcedo, Nardelli, Pippalla, Gentz, Thotakura, Parmelee, Gentz, and Garotta.
Nardon, E. *See* Tedesco, Pausa, Nardon, Introna, Mantovani, and Dobrina.
Naujokas, M.F. *See* Brown, Swier, Moskowitz, Naujokas, Locksley, and Reiner.
Nehls, M. *See* Dimmeler, Haendeler, Nehls, and Zeiher.
Neuberger, M.S. *See* Teh and Neuberger.
Neumann, H., Schmidt, H., Cavalié, A., Jenne, D., and Wekerle, H. Major histocompatibility complex (MHC) class I gene expression in single neurons of the central nervous system: differential regulation by interferon (IFN)-γ and tumor necrosis factor (TNF)-α. 305.
Newman, W. *See* Wu, Paxton, Kassam, Ruffing, Rottman, Sullivan, Choe, Sodroski, Newman, Koup, and Mackay.
Nguyen, J.T. *See* Perillo, Uittenbogaart, Nguyen, and Baum.
Nguyen, N. *See* Norment, Forbush, Nguyen, Malissen, and Perlmutter.
Nguyen, P. *See* Tripp, Hamilton-Easton, Cardin, Nguyen, Behm, Woodland, Doherty, and Blackman.
Nicotera, P. *See* Leist, Single, Castoldi, Kühnle, and Nicotera.
Nielsen, P.J. *See* Liu, Wenger, Zhao, and Nielsen.
Niemi, E.C. *See* Nakamura, Niemi, Fisher, Shultz, Seaman, and Ryan.
Nikolic-Paterson, D.J. *See* Lan, Bacher, Yang, Mu, Nikolic-Paterson, Metz, Meinhardt, Bucala, and Atkins.
Nishizumi, H. *See* Yamanashi, Fukuda, Nishizumi, Inazu, Higashi, Kitamura, Ishida, Yamamura, Watanabe, and Yamamoto.
Noda, M. *See* Yamamoto, Takeda, Yamamoto, Kurazono, Imaoka, Yamamoto, Fujihashi, Noda, Kiyono, and McGhee.
Noel, G.J. *See* Sutterwala, Noel, Clynes, and Mosser.
Noguchi, M. *See* Nakajima, Shores, Noguchi, and Leonard.
Nolan, G.P. *See* Shaw, Lorens, Dhawan, DalCanto, Tse, Tran, Bonpane, Eswaran, Brocke, Sarvetnick, Steinman, Nolan, and Fathman.
Norin, A.J. *See* Das, Mondragon, Tao, and Norin.
Norment, A.M., Forbush, K.A., Nguyen, N., Malissen, M., and Perlmutter, R.M. Replacement of pre-T cell receptor signaling functions by the CD4 coreceptor. 121.
Nussbaum, G., Cleare, W., Casadevall, A., Scharff, M.D., and Valadon, P. Epitope location in the *Cryptococcus neoformans* capsule is a determinant of antibody efficacy. 685.
Nussenzweig, M.C. *See* Papavasiliou, Jankovic, and Nussenzweig.
— *See* Sawchuk, Weis-Garcia, Malik, Besmer, Bustin, Nussenzweig, and Cortes.
Nussenzweig, V. *See* Yu, Abagyan, Dong, Gilbert, Nussenzweig, and Tomlinson.

O

Obata, Y. *See* Doi, Takahashi, Taguchi, Azuma, and Obata.
Obeid, L.M. *See* Dbaibo, Perry, Gamard, Platt, Poirier, Obeid, and Hannun.
Odenthal, M. *See* Peters, Schirmacher, Goldschmitt, Odenthal, Peschel, Fattori, Ciliberto, Dienes, Meyer zum Büschenfelde, and Rose-John.
Odermatt, B. *See* Fehr, Schoedon, Odermatt, Holtschke, Schneemann, Bachmann, Mak, Horak, and Zinkernagel.
— *See* Karrer, Althage, Odermatt, Roberts, Korsmeyer, Miyawaki, Hengartner, and Zinkernagel.
Oettgen, H.C. *See* Yamaguchi, Lantz, Oettgen, Katona, Fleming, Miyajima, Kinet, and Galli.
Ogawa, M. *See* Kudo, Matsuno, Ezaki, and Ogawa.
Ohashi, P.S. *See* Speiser, Lee, Wong, Arron, Santana, Kong, Ohashi, and Choi.
Okamura, H. *See* Udagawa, Horwood, Elliott, Mackay, Owens, Okamura, Kurimoto, Chambers, Martin, and Gillespie.
Oldstone, M.B.A. *See* von Herrath and Oldstone.
Ona, M.A. *See* Ganju, Hatch, Avraham, Ona, Druker, Avraham, and Groopman.
Opal, S.M. *See* Ruzek, Miller, Opal, Pearce, and Biron.
Owens, J. *See* Udagawa, Horwood, Elliott, Mackay, Owens, Okamura, Kurimoto, Chambers, Martin, and Gillespie.

P

Padua, R.A. *See* Darley, Hoy, Baines, Padua, and Burnett.
Palmer, L.D., Weng, N.-p., Levine, B.L., June, C.H., Lane, H.C., and Hodes, R.J. Telomere length, telomerase activity, and replicative potential in HIV infection: analysis of $CD4^+$ and $CD8^+$ T cells from HIV-discordant monozygotic twins. 1381.
Palomba, C. *See* Carbone, Ruggiero, Terrazzano, Palomba, Manzo, Fontana, Spits, Kärre, and Zappacosta.
Pals, S.T. *See* van der Voort, Taher, Keehnen, Smit, Groenink, and Pals.
Pamer, E.G. *See* Sijts and Pamer.
Panicali, D. *See* Pikora, Sullivan, Panicali, and Luzuriaga.
Papavasiliou, F., Jankovic, M., and Nussenzweig, M.C. Surrogate or conventional light chains are required for membrane immunoglobulin mu to activate the precursor B cell transition: Correction. 183.
Parham, C.L. *See* Liu, Xu, de Bouteiller, Parham, Grouard, Djossou, de Saint-Vis, Lebecque, Banchereau, and Moore.
Park, S.D. *See* Jeon, Kang, Kim, Jin, Lee, Chung, Kwon, Park, and Seong.
Park, S.Y. *See* Saijo, Park, Ishida, Arase, and Saito.
Parmelee, D. *See* Patel, Kreider, Li, Li, Leung, Salcedo, Nardelli, Pippalla, Gentz, Thotakura, Parmelee, Gentz, and Garotta.
Pascolo, S., Bervas, N., Ure, J.M., Smith, A.G., Lemonnier, F.A., and Pérarnau, B. HLA-A2.1–restricted education and cytolytic activity of $CD8^+$ T lymphocytes from β2 microglobulin (β2m) HLA-A2.1 monochain transgenic H-$2D^b$ β2m double knockout mice. 2043.

Pasquier, R. *See* Bridoux, Badou, Saoudi, Bernard, Druet, Pasquier, Druet, and Pelletier.
Passini, N. *See* Rogge, Barberis-Maino, Biffi, Passini, Presky, Gubler, and Sinigaglia.
Patel, V.P., Kreider, B.L., Li, Y., Li, H., Leung, K., Salcedo, T., Nardelli, B., Pippalla, V., Gentz, S., Thotakura, R., Parmelee, D., Gentz, R., and Garotta, G. Molecular and functional characterization of two novel human C-C chemokines as inhibitors of two distinct classes of myeloid progenitors. 1163.
Pausa, M. *See* Tedesco, Pausa, Nardon, Introna, Mantovani, and Dobrina.
Paxton, W.A. *See* Wu, Paxton, Kassam, Ruffing, Rottman, Sullivan, Choe, Sodroski, Newman, Koup, and Mackay.
Paya, C.V. *See* Badley, Dockrell, Simpson, Schut, Lynch, Leibson, and Paya.
Peach, R. *See* Harris, Peach, Naemura, Linsley, Le Gros, and Ronchese.
Pearce, B.D. *See* Ruzek, Miller, Opal, Pearce, and Biron.
Pearlman, E. *See* Rothenberg, MacLean, Pearlman, Luster, and Leder.
Pearson, C.I., van Ewijk, W., and McDevitt, H.O. Induction of apoptosis and T helper 2 (Th2) responses correlates with peptide affinity for the major histocompatibility complex in self-reactive T cell receptor transgenic mice. 583.
Peden, K.W.C. *See* Liao, Alkhatib, Peden, Sharma, Berger, and Farber.
Peichl, P. *See* Billich, Winkler, Aschauer, Rot, and Peichl.
Pejler, G. *See* Lützelschwab, Pejler, Aveskogh, and Hellman.
Pelletier, L. *See* Bridoux, Badou, Saoudi, Bernard, Druet, Pasquier, Druet, and Pelletier.
Penna, G. *See* Winzler, Rovere, Rescigno, Granucci, Penna, Adorini, Zimmermann, Davoust, and Ricciardi-Castagnoli.
Pérarnau, B. *See* Pascolo, Bervas, Ure, Smith, Lemonnier, and Pérarnau.
Perillo, N.L., Uittenbogaart, C.H., Nguyen, J.T., and Baum, L.G. Galectin-1, an endogenous lectin produced by thymic epithelial cells, induces apoptosis of human thymocytes. 1851.
Perlmutter, R.M. *See* Norment, Forbush, Nguyen, Malissen, and Perlmutter.
Perry, D.K. *See* Dbaibo, Perry, Gamard, Platt, Poirier, Obeid, and Hannun.
Perry-Lalley, D. *See* Bloom, Perry-Lalley, Robbins, Li, El-Gamil, Rosenberg, and Yang.
Persson, C.G.A. *See* Korsgren, Erjefält, Korsgren, Sundler, and Persson.
Perussia, B. *See* Bennett, Zatsepina, Zamai, Azzoni, Mikheeva, and Perussia.
Peschel, C. *See* Peters, Schirmacher, Goldschmitt, Odenthal, Peschel, Fattori, Ciliberto, Dienes, Meyer zum Büschenfelde, and Rose-John.
Petasis, N.A. *See* Takano, Fiore, Maddox, Brady, Petasis, and Serhan.
Peters, M., Schirmacher, P., Goldschmitt, J., Odenthal, M., Peschel, C., Fattori, E., Ciliberto, G., Dienes, H.-P., Meyer zum Büschenfelde, K.-H., and Rose-John, S. Extramedullary expansion of hematopoietic progenitor cells in interleukin (IL)-6–sIL-6R double transgenic mice. 755.
Petersen, A. *See* Schönbeck, Herzberg, Petersen, Wohlenberg, Gerdes, Flad, and Loppnow.
Peterson, D. *See* Punnonen, Cocks, Carballido, Bennett, Peterson, Aversa, and de Vries.
Peterson, P.A. *See* Cai, Kishimoto, Brunmark, Jackson, Peterson, and Sprent.
Petrie, H.T. *See* Tourigny, Mazel, Burtrum, and Petrie.
Pfizenmaier, K. *See* Lazdins, Grell, Walker, Woods-Cook, Scheurich, and Pfizenmaier.
Phillips, R.E. *See* Goulder, Sewell, Lalloo, Price, Whelan, Evans, Taylor, Luzzi, Giangrande, Phillips, and McMichael.
Pikora, C.A., Sullivan, J.L., Panicali, D., and Luzuriaga, K. Early HIV-1 envelope-specific cytotoxic T lymphocyte responses in vertically infected infants. 1153.
Pinner, E. *See* Gruenheid, Pinner, Desjardins, and Gros.
Pippalla, V. *See* Patel, Kreider, Li, Li, Leung, Salcedo, Nardelli, Pippalla, Gentz, Thotakura, Parmelee, Gentz, and Garotta.
Pla, M. *See* Serdobova, Pla, Reichenbach, Sperisen, Ghysdael, Wilson, Freeman, and Nabholz.
Platt, R. *See* Dbaibo, Perry, Gamard, Platt, Poirier, Obeid, and Hannun.
Ploegh, H.L. *See* Galocha, Hill, Barnett, Dolan, Raimondi, Cook, Brunner, McGeoch, and Ploegh.
— *See* Machold, Wiertz, Jones, and Ploegh.
Ploplis, V.A. *See* Kitching, Holdsworth, Ploplis, Plow, Collen, Carmeliet, and Tipping.
Plow, E.F. *See* Kitching, Holdsworth, Ploplis, Plow, Collen, Carmeliet, and Tipping.
Poirier, G.G. *See* Dbaibo, Perry, Gamard, Platt, Poirier, Obeid, and Hannun.
Polentarutti, N. *See* Sica, Saccani, Borsatti, Power, Wells, Luini, Polentarutti, Sozzani, and Mantovani.
Pollock, J.D. *See* Tian, Broxmeyer, Fan, Lai, Zhang, Aronica, Cooper, Bigsby, Steinmetz, Engle, Mestek, Pollock, Lehman, Jansen, Ying, Stambrook, Tischfield, and Yu.
Polo, S. *See* Verani, Scarlatti, Comar, Tresoldi, Polo, Giacca, Lusso, Siccardi, and Vercelli.
Poltoratsky, V. *See* Scharff, Poltoratsky, and Green.
Pon, R.A., Lussier, M., Yang, Q.-L., and Jennings, H.J. *N*-propionylated group B meningococcal polysaccharide mimics a unique bactericidal capsular epitope in group B *Neisseria meningitidis*. 1929.
Posch, P.E. *See* Brooks, Posch, Scorzelli, Borrego, and Coligan.
Posnett, D.N., and Edinger, J. When do microbes stimulate rheumatoid factor? 1721.
Potter, N.T. *See* Legge, Min, Potter, and Zaghouani.
Potter, T.A. *See* Smith, Brunmark, Jackson, and Potter.
Power, C.A. *See* Sica, Saccani, Borsatti, Power, Wells, Luini, Polentarutti, Sozzani, and Mantovani.
Preckel, T., Grimm, R., Martin, S., and Weltzien, H.U. Altered hapten ligands antagonize trinitrophenyl-specific cytotoxic T cells and block internalization of hapten-specific receptors. 1803.
Presky, D.H. *See* Rogge, Barberis-Maino, Biffi, Passini, Presky, Gubler, and Sinigaglia.
Price, D.A. *See* Goulder, Sewell, Lalloo, Price, Whelan, Evans, Taylor, Luzzi, Giangrande, Phillips, and McMichael.
Probert, L. *See* Cope, Liblau, Yang, Congia, Laudanna, Schreiber, Probert, Kollias, and McDevitt.
Proudfoot, A. *See* Lloyd, Minto, Dorf, Proudfoot, Wells, Salant, and Gutierrez-Ramos.
Punnonen, J., Cocks, B.G., Carballido, J.M., Bennett, B., Peterson, D., Aversa, G., and de Vries, J.E. Soluble and membrane-bound forms of signaling lymphocytic activation molecule (SLAM) induce proliferation and Ig synthesis by activated human B lymphocytes. 993.

Q

Qian, D., Lev, S., van Oers, N.S.C., Dikic, I., Schlessinger, J., and Weiss, A. Tyrosine phosphorylation of Pyk2 is selectively regulated by Fyn during TCR signaling. 1253.

R

Rabinowitz, J.D. *See* Wülfing, Rabinowitz, Beeson, Sjaastad, McConnell, and Davis.
Raimondi, A. *See* Galocha, Hill, Barnett, Dolan, Raimondi, Cook, Brunner, McGeoch, and Ploegh.
Rajagopalan, S., and Long, E.O. The direct binding of a p58 killer cell inhibitory receptor to human histocompatibility leukocyte antigen (HLA)-Cw4 exhibits peptide selectivity. 1523.
Rajotte, D., Cadieux, C., Haman, A., Wilkes, B.C., Clark, S.C., Hercus, T., Woodcock, J.A., Lopez, A., and Hoang, T. Crucial role of the residue R280 at the F′–G′ loop of the human granulocyte/macrophage colony-stimulating factor receptor α chain for ligand recognition. 1939.
Rammensee, H.-G. *See* Münz, Holmes, King, Loke, Colonna, Schild, and Rammensee.
Raport, C.J. *See* Godiska, Chantry, Raport, Sozzani, Allavena, Leviten, Mantovani, and Gray.
Rassenti, L.Z., and Kipps, T.J. Lack of allelic exclusion in B cell chronic lymphocytic leukemia. 1435.
Raulet, D.H. *See* Held and Raulet.

Reed, J.C. *See* Zhang, Brunner, Carter, Dutton, Rogers, Bradley, Sato, Reed, Green, and Swain.
Reich, Z. *See* Crowley, Reich, Mavaddat, Altman, and Chien.
Reichenbach, P. *See* Serdobova, Pla, Reichenbach, Sperisen, Ghysdael, Wilson, Freeman, and Nabholz.
Reid, S.W. *See* Davenport, Smith, Barouch, Reid, Bodnar, Willis, Hunt, and Hill.
Reiner, S.L. *See* Brown, Swier, Moskowitz, Naujokas, Locksley, and Reiner.
Reinhold, M.I., Lindberg, F.P., Kersh, G.J., Allen, P.M., and Brown, E.J. Costimulation of T cell activation by integrin-associated protein (CD47) is an adhesion-dependent, CD28-independent signaling pathway. 1.
Reininger, L. *See* Santiago, Fossati, Jacquet, Müller, Izui, and Reininger.
Rennick, D.M. *See* Grünig, Corry, Leach, Seymour, Kurup, and Rennick.
Res, P., Blom, B., Hori, T., Weijer, K., and Spits, H. Down-regulation of CD1 marks acquisition of functional maturation of human thymocytes and defines a control point in late stages of human T cell development. 141.
— *See* Bruno, Res, Dessing, Cella, and Spits.
Rescigno, M. *See* Winzler, Rovere, Rescigno, Granucci, Penna, Adorini, Zimmermann, Davoust, and Ricciardi-Castagnoli.
Ricciardi-Castagnoli, P. *See* Winzler, Rovere, Rescigno, Granucci, Penna, Adorini, Zimmermann, Davoust, and Ricciardi-Castagnoli.
Rickinson, A.B. *See* Steven, Annels, Kumar, Leese, Kurilla, and Rickinson.
Riedinger, M. *See* Brocker, Riedinger, and Karjalainen.
Rimm, I.J. *See* Adler, Beland, Del-Pan, Kobzik, Brewer, Martin, and Rimm.
Rincón, M., Anguita, J., Nakamura, T., Fikrig, E., and Flavell, R.A. Interleukin (IL)-6 directs the differentiation of IL-4–producing $CD4^+$ T cells. 461.
Rissoan, M.-C. *See* Grouard, Rissoan, Filgueira, Durand, Banchereau, and Liu.
Rivet, D.J., III *See* Sarraf, Frederich, Turner, Ma, Jaskowiak, Rivet, Flier, Lowell, Fraker, and Alexander.
Rivett, K. *See* Erb, Rüger, von Brevern, Ryffel, Schimpl, and Rivett.
Roach, M.L. *See* Griffiths, Smith, Roach, Stock, Stam, Milici, Scampoli, Eskra, Byrum, Koller, and McNeish.
Robbins, P.F. *See* Bloom, Perry-Lalley, Robbins, Li, El-Gamil, Rosenberg, and Yang.
Roberts, C.W.M. *See* Karrer, Althage, Odermatt, Roberts, Korsmeyer, Miyawaki, Hengartner, and Zinkernagel.
Roberts, J.L., Lauzurica, P., and Krangel, M.S. Developmental regulation of VDJ recombination by the core fragment of the T cell receptor α enhancer. 131.
— *See* Lauzurica, Zhong, Krangel, and Roberts.
Roberts, L.J., Baldwin, T.M., Curtis, J.M., Handman, E., and Foote, S.J. Resistance to *Leishmania major* is linked to the H2 region on chromosome 17 and to chromosome 9. 1705.
Robson, S.C., Kaczmarek, E., Siegel, J.B., Candinas, D., Koziak, K., Millan, M., Hancock, W.W., and Bach, F.H. Loss of ATP diphosphohydrolase activity with endothelial cell activation. 153.
Rogers, P. *See* Zhang, Brunner, Carter, Dutton, Rogers, Bradley, Sato, Reed, Green, and Swain.
Rogge, L., Barberis-Maino, L., Biffi, M., Passini, N., Presky, D.H., Gubler, U., and Sinigaglia, F. Selective expression of an interleukin-12 receptor component by human T helper 1 cells. 825.
Romagnoli, P. *See* Zhong, Romagnoli, and Germain.
Ronchese, F. *See* Harris, Peach, Naemura, Linsley, Le Gros, and Ronchese.
Rose-John, S. *See* Peters, Schirmacher, Goldschmitt, Odenthal, Peschel, Fattori, Ciliberto, Dienes, Meyer zum Büschenfelde, and Rose-John.
Rosen, A. *See* Casciola-Rosen, Wigley, and Rosen.
Rosenberg, S.A. *See* Bloom, Perry-Lalley, Robbins, Li, El-Gamil, Rosenberg, and Yang.
Rosloniec, E.F., Brand, D.D., Myers, L.K., Whittington, K.B., Gumanovskaya, M., Zaller, D.M., Woods, A., Altmann, D.M., Stuart, J.M., and Kang, A.H. An HLA-DR1 transgene confers susceptibility to collagen-induced arthritis elicited with human type II collagen. 1113.
Rot, A. *See* Billich, Winkler, Aschauer, Rot, and Peichl.
Rothenberg, M.E., MacLean, J.A., Pearlman, E., Luster, A.D., and Leder, P. Targeted disruption of the chemokine eotaxin partially reduces antigen-induced tissue eosinophilia. 785.
Rothstein, T.L. *See* Karras, Wang, Huo, Howard, Frank, and Rothstein.
Rottman, J.B. *See* Wu, Paxton, Kassam, Ruffing, Rottman, Sullivan, Choe, Sodroski, Newman, Koup, and Mackay.
Rovere, P. *See* Winzler, Rovere, Rescigno, Granucci, Penna, Adorini, Zimmermann, Davoust, and Ricciardi-Castagnoli.
Rubin, E.M. *See* Shao, Kono, Chen, Rubin, and Kaye.
Ruffing, N. *See* Wu, Paxton, Kassam, Ruffing, Rottman, Sullivan, Choe, Sodroski, Newman, Koup, and Mackay.
Rüger, B. *See* Erb, Rüger, von Brevern, Ryffel, Schimpl, and Rivett.
Ruggiero, G. *See* Carbone, Ruggiero, Terrazzano, Palomba, Manzo, Fontana, Spits, Kärre, and Zappacosta.
Rushmere, N.K. *See* Bodian, Davis, Morgan, and Rushmere.
Ruzek, M.C., Miller, A.H., Opal, S.M., Pearce, B.D., and Biron, C.A. Characterization of early cytokine responses and an interleukin (IL)-6–dependent pathway of endogenous glucocorticoid induction during murine cytomegalovirus infection. 1185.
Ryan, J.C. *See* Nakamura, Niemi, Fisher, Shultz, Seaman, and Ryan.
Ryffel, B. *See* Erb, Rüger, von Brevern, Ryffel, Schimpl, and Rivett.

S

Saccani, A. *See* Sica, Saccani, Borsatti, Power, Wells, Luini, Polentarutti, Sozzani, and Mantovani.
Saeland, S. *See* Flores-Romo, Björck, Duvert, van Kooten, Saeland, and Banchereau.
Saenko, V. *See* Spatz, Saenko, Iliev, Jones, Geskin, and Diamond.
Saijo, K., Park, S.Y., Ishida, Y., Arase, H., and Saito, T. Crucial role of Jak3 in negative selection of self-reactive T cells. 351.
Saito, T. *See* Saijo, Park, Ishida, Arase, and Saito.
Salant, D.J. *See* Lloyd, Minto, Dorf, Proudfoot, Wells, Salant, and Gutierrez-Ramos.
Salcedo, T. *See* Patel, Kreider, Li, Li, Leung, Salcedo, Nardelli, Pippalla, Gentz, Thotakura, Parmelee, Gentz, and Garotta.
Salio, M. *See* Valitutti, Müller, Salio, and Lanzavecchia.
Samaridis, J. *See* Cella, Döhring, Samaridis, Dessing, Brockhaus, Lanzavecchia, and Colonna.
Santana, A. *See* Speiser, Lee, Wong, Arron, Santana, Kong, Ohashi, and Choi.
Santiago, M.-L., Fossati, L., Jacquet, C., Müller, W., Izui, S., and Reininger, L. Interleukin-4 protects against a genetically linked lupus-like autoimmune syndrome. 65.
Saoudi, A. *See* Bridoux, Badou, Saoudi, Bernard, Druet, Pasquier, Druet, and Pelletier.
Sarafi, M.N., Garcia-Zepeda, E.A., MacLean, J.A., Charo, I.F., and Luster, A.D. Murine monocyte chemoattractant protein (MCP)-5: a novel CC chemokine that is a structural and functional homologue of human MCP-1. 99.
Sarraf, P., Frederich, R.C., Turner, E.M., Ma, G., Jaskowiak, N.T., Rivet, D.J., III, Flier, J.S., Lowell, B.B., Fraker, D.L., and Alexander, H.R. Multiple cytokines and acute inflammation raise mouse leptin levels: potential role in inflammatory anorexia. 171.
Sarukhan, A. *See* Lanoue, Bona, von Boehmer, and Sarukhan.
Sarvetnick, N. *See* Shaw, Lorens, Dhawan, DalCanto, Tse, Tran, Bonpane, Eswaran, Brocke, Sarvetnick, Steinman, Nolan, and Fathman.
Sasakawa, C. *See* Watarai, Kamata, Kozaki, and Sasakawa.
Sato, A. *See* Tachibana, Nakajima, Sato, Igarashi, Shida, Iizasa, Yoshida, Yoshie, Kishimoto, and Nagasawa.
Sato, T. *See* Zhang, Brunner, Carter, Dutton, Rogers, Bradley, Sato, Reed, Green, and Swain.
Sawchuk, D.J., Weis-Garcia, F., Malik, S., Besmer, E., Bustin, M., Nussenzweig, M.C., and Cortes, P. V(D)J recombination: modulation of *RAG1* and *RAG2* cleavage activity on 12/23 substrates by whole cell extract and DNA-bending proteins. 2025.
Scampoli, D.N. *See* Griffiths, Smith, Roach, Stock, Stam, Milici, Scampoli, Eskra, Byrum, Koller, and McNeish.

Scarlatti, G. *See* Verani, Scarlatti, Comar, Tresoldi, Polo, Giacca, Lusso, Siccardi, and Vercelli.
Scharff, M.D., Poltoratsky, V., and Green, N.S. The promotion of V region hypermutation. 185.
— *See* Nussbaum, Cleare, Casadevall, Scharff, and Valadon.
Scharton-Kersten, T.M., Yap, G., Magram, J., and Sher, A. Inducible nitric oxide is essential for host control of persistent but not acute infection with the intracellular pathogen *Toxoplasma gondii*. 1261.
Scherer, D.C. *See* Boothby, Mora, Scherer, Brockman, and Ballard.
Scheurich, P. *See* Lazdins, Grell, Walker, Woods-Cook, Scheurich, and Pfizenmaier.
Schild, H. *See* Münz, Holmes, King, Loke, Colonna, Schild, and Rammensee.
Schimpl, A. *See* Erb, Rüger, von Brevern, Ryffel, Schimpl, and Rivett.
— *See* Kerkau, Bacik, Bennink, Yewdell, Hünig, Schimpl, and Schubert.
Schirmacher, P. *See* Peters, Schirmacher, Goldschmitt, Odenthal, Peschel, Fattori, Ciliberto, Dienes, Meyer zum Büschenfelde, and Rose-John.
Schlessinger, J. *See* Qian, Lev, van Oers, Dikic, Schlessinger, and Weiss.
Schlissel, M.S. *See* Constantinescu and Schlissel.
Schmidt, H. *See* Neumann, Schmidt, Cavalié, Jenne, and Wekerle.
Schneemann, M. *See* Fehr, Schoedon, Odermatt, Holtschke, Schneemann, Bachmann, Mak, Horak, and Zinkernagel.
Schoedon, G. *See* Fehr, Schoedon, Odermatt, Holtschke, Schneemann, Bachmann, Mak, Horak, and Zinkernagel.
Schönbeck, U., Herzberg, M., Petersen, A., Wohlenberg, C., Gerdes, J., Flad, H.-D., and Loppnow, H. Human vascular smooth muscle cells express interleukin-1β–converting enzyme (ICE), but inhibit processing of the interleukin-1β precursor by ICE. 1287.
Schreiber, H. *See* Dubey, Hendrickson, Meredith, Siegel, Shabanowitz, Skipper, Engelhard, Hunt, and Schreiber.
Schreiber, R.D. *See* Cope, Liblau, Yang, Congia, Laudanna, Schreiber, Probert, Kollias, and McDevitt.
Schubert, U. *See* Kerkau, Bacik, Bennink, Yewdell, Hünig, Schimpl, and Schubert.
Schur, P.H. *See* Utz, Hottelet, Schur, and Anderson.
Schut, R. *See* Badley, Dockrell, Simpson, Schut, Lynch, Leibson, and Paya.
Sciammas, R., Kodukula, P., Tang, Q., Hendricks, R.L., and Bluestone, J.A. T cell receptor–γ/δ cells protect mice from herpes simplex virus type 1–induced lethal encephalitis. 1969.
Scorzelli, C.J. *See* Brooks, Posch, Scorzelli, Borrego, and Coligan.
Seaman, W.E. *See* Nakamura, Niemi, Fisher, Shultz, Seaman, and Ryan.
Seibel, J.L., Wilson, N., Kozono, H., Marrack, P., and Kappler, J.W. Influence of the NH_2-terminal amino acid of the T cell receptor α chain on major histocompatibility complex (MHC) class II + peptide recognition. 1919.
Sekaly, R.-P. *See* Delcourt, Thibodeau, Denis, and Sekaly.
Sekido, R. *See* Higashi, Moribe, Takagi, Sekido, Kawakami, Kikutani, and Kondoh.
Seong, R.H. *See* Jeon, Kang, Kim, Jin, Lee, Chung, Kwon, Park, and Seong.
Sercarz, E. *See* Kumar, Aziz, Sercarz, and Miller.
Sercarz, E.E. *See* Moudgil, Chang, Eradat, Chen, Gupta, Brahn, and Sercarz.
Serdobova, I., Pla, M., Reichenbach, P., Sperisen, P., Ghysdael, J., Wilson, A., Freeman, J., and Nabholz, M. Elf-1 contributes to the function of the complex interleukin (IL)-2–responsive enhancer in the mouse IL-2 receptor α gene. 1211.
Serhan, C.N. *See* Takano, Fiore, Maddox, Brady, Petasis, and Serhan.
Serikawa, T. *See* Murakami, Nakajima, Yamazaki, Muraguchi, Serikawa, and Honjo.
Sewell, A.K. *See* Goulder, Sewell, Lalloo, Price, Whelan, Evans, Taylor, Luzzi, Giangrande, Phillips, and McMichael.
Seydel, K.B. *See* Lotter, Zhang, Seydel, Stanley, and Tannich.
Seymour, B.W.P. *See* Grünig, Corry, Leach, Seymour, Kurup, and Rennick.
Sha, W.C. *See* Weih, Durham, Barton, Sha, Baltimore, and Bravo.
Shabanowitz, J. *See* Dubey, Hendrickson, Meredith, Siegel, Shabanowitz, Skipper, Engelhard, Hunt, and Schreiber.
Shao, H., Kono, D.H., Chen, L.-Y., Rubin, E.M., and Kaye, J. Induction of the early growth response (Egr) family of transcription factors during thymic selection. 731.
Sharara, L.I. *See* Lantz, Sharara, Tilloy, Andersson, and DiSanto.
Sharma, G. *See* Liao, Alkhatib, Peden, Sharma, Berger, and Farber.
Sharma, S. *See* Hagenbaugh, Sharma, Dubinett, Wei, Aranda, Cheroutre, Fowell, Binder, Tsao, Locksley, Moore, and Kronenberg.
Shaw, M.K., Lorens, J.B., Dhawan, A., DalCanto, R., Tse, H.Y., Tran, A.B., Bonpane, C., Eswaran, S.L., Brocke, S., Sarvetnick, N., Steinman, L., Nolan, G.P., and Fathman, C.G. Local delivery of interleukin 4 by retrovirus-transduced T lymphocytes ameliorates experimental autoimmune encephalomyelitis. 1711.
Shen, H. *See* Shores, Tran, Grinberg, Sommers, Shen, and Love.
Sher, A. *See* Scharton-Kersten, Yap, Magram, and Sher.
Sheridan, K.E. *See* Connor, Sheridan, Ceradini, Choe, and Landau.
Sherman, L.A. *See* Theobald, Biggs, Hernández, Lustgarten, Labadie, and Sherman.
Sherry, B. *See* Zhang, Caragine, Wang, Cohen, Botchkina, Soda, Bianchi, Ulrich, Cerami, Sherry, and Tracey.
Shi, L., Mai, S., Israels, S., Browne, K., Trapani, J.A., and Greenberg, A.H. Granzyme B (GraB) autonomously crosses the cell membrane and perforin initiates apoptosis and GraB nuclear localization. 855.
Shida, H. *See* Tachibana, Nakajima, Sato, Igarashi, Shida, Iizasa, Yoshida, Yoshie, Kishimoto, and Nagasawa.
Shores, E.W., Tran, T., Grinberg, A., Sommers, C.L., Shen, H., and Love, P.E. Role of the multiple T cell receptor (TCR)-ζ chain signaling motifs in selection of the T cell repertoire. 893.
— *See* Nakajima, Shores, Noguchi, and Leonard.
Shultz, L.D. *See* Nakamura, Niemi, Fisher, Shultz, Seaman, and Ryan.
Sica, A., Saccani, A., Borsatti, A., Power, C.A., Wells, T.N.C., Luini, W., Polentarutti, N., Sozzani, S., and Mantovani, A. Bacterial lipopolysaccharide rapidly inhibits expression of C–C chemokine receptors in human monocytes. 969.
Siccardi, A.G. *See* Verani, Scarlatti, Comar, Tresoldi, Polo, Giacca, Lusso, Siccardi, and Vercelli.
Siegel, C.T. *See* Dubey, Hendrickson, Meredith, Siegel, Shabanowitz, Skipper, Engelhard, Hunt, and Schreiber.
Siegel, J.B. *See* Robson, Kaczmarek, Siegel, Candinas, Koziak, Millan, Hancock, and Bach.
Sijts, A.J.A.M., and Pamer, E.G. Enhanced intracellular dissociation of major histocompatibility complex class I–associated peptides: a mechanism for optimizing the spectrum of cell surface–presented cytotoxic T lymphocyte epitopes. 1403.
Siliciano, R.F. *See* Tobery and Siliciano.
Simpson, M. *See* Badley, Dockrell, Simpson, Schut, Lynch, Leibson, and Paya.
Single, B. *See* Leist, Single, Castoldi, Kühnle, and Nicotera.
Sinigaglia, F. *See* Barnaba and Sinigaglia.
— *See* Rogge, Barberis-Maino, Biffi, Passini, Presky, Gubler, and Sinigaglia.
Sjaastad, M.D. *See* Wülfing, Rabinowitz, Beeson, Sjaastad, McConnell, and Davis.
Skipper, J.C.A. *See* Dubey, Hendrickson, Meredith, Siegel, Shabanowitz, Skipper, Engelhard, Hunt, and Schreiber.
Slovik, E. *See* Bieganowska, Ausubel, Modabber, Slovik, Messersmith, and Hafler.
Smit, L. *See* van der Voort, Taher, Keehnen, Smit, Groenink, and Pals.
Smith, A.G. *See* Pascolo, Bervas, Ure, Smith, Lemonnier, and Périarnau.
Smith, C.W. *See* Kanwar, Bullard, Hickey, Smith, Beaudet, Wolitzky, and Kubes.
Smith, J. *See* Madrenas, Chau, Smith, Bluestone, and Germain.
Smith, J.A., Tso, J.Y., Clark, M.R., Cole, M.S., and Bluestone, J.A. Nonmitogenic anti-CD3 monoclonal antibodies deliver a partial T cell receptor signal and induce clonal anergy. 1413.
Smith, K.J. *See* Davenport, Smith, Barouch, Reid, Bodnar, Willis, Hunt, and Hill.
Smith, M. *See* Griffiths, Smith, Roach, Stock, Stam, Milici, Scampoli, Eskra, Byrum, Koller, and McNeish.
Smith, P.A., Brunmark, A., Jackson, M.R., and Potter, T.A. Peptide-independent recognition by alloreactive cytotoxic T lymphocytes (CTL). 1023.

Soda, K. *See* Zhang, Caragine, Wang, Cohen, Botchkina, Soda, Bianchi, Ulrich, Cerami, Sherry, and Tracey.
Sodroski, J. *See* Wu, Paxton, Kassam, Ruffing, Rottman, Sullivan, Choe, Sodroski, Newman, Koup, and Mackay.
Sommers, C.L. *See* Shores, Tran, Grinberg, Sommers, Shen, and Love.
Sozzani, S. *See* Godiska, Chantry, Raport, Sozzani, Allavena, Leviten, Mantovani, and Gray.
— *See* Sica, Saccani, Borsatti, Power, Wells, Luini, Polentarutti, Sozzani, and Mantovani.
Spatz, L., Saenko, V., Iliev, A., Jones, L., Geskin, L., and Diamond, B. Light chain usage in anti–double-stranded DNA B cell subsets: role in cell fate determination. 1317.
Speiser, D.E., Lee, S.Y., Wong, B., Arron, J., Santana, A., Kong, Y.-Y., Ohashi, P.S., and Choi, Y. A regulatory role for TRAF1 in antigen-induced apoptosis of T cells. 1777.
Sperisen, P. *See* Serdobova, Pla, Reichenbach, Sperisen, Ghysdael, Wilson, Freeman, and Nabholz.
Spits, H. *See* Bruno, Res, Dessing, Cella, and Spits.
— *See* Carbone, Ruggiero, Terrazzano, Palomba, Manzo, Fontana, Spits, Kärre, and Zappacosta.
— *See* Res, Blom, Hori, Weijer, and Spits.
Sprent, J. *See* Cai, Kishimoto, Brunmark, Jackson, Peterson, and Sprent.
— *See* Kishimoto and Sprent.
— *See* Tough, Sun, and Sprent.
Springer, T. *See* Aiuti, Webb, Bleul, Springer, and Gutierrez-Ramos.
Stam, E.J. *See* Griffiths, Smith, Roach, Stock, Stam, Milici, Scampoli, Eskra, Byrum, Koller, and McNeish.
Stambrook, P.J. *See* Tian, Broxmeyer, Fan, Lai, Zhang, Aronica, Cooper, Bigsby, Steinmetz, Engle, Mestek, Pollock, Lehman, Jansen, Ying, Stambrook, Tischfield, and Yu.
Stanley, S.L., Jr. *See* Lotter, Zhang, Seydel, Stanley, and Tannich.
Starling, G.C., Bajorath, J., Emswiler, J., Ledbetter, J.A., Aruffo, A., and Kiener, P.A. Identification of amino acid residues important for ligand binding to Fas. 1487.
Steegmaier, M. *See* Borges, Tietz, Steegmaier, Moll, Hallmann, Hamann, and Vestweber.
— *See* Kiener, Davis, Starling, Mehlin, Klebanoff, Ledbetter, and Liles.
Steinman, L. Some misconceptions about understanding autoimmunity through experiments with knockouts. 2039.
— *See* Shaw, Lorens, Dhawan, DalCanto, Tse, Tran, Bonpane, Eswaran, Brocke, Sarvetnick, Steinman, Nolan, and Fathman.
Steinmetz, R. *See* Tian, Broxmeyer, Fan, Lai, Zhang, Aronica, Cooper, Bigsby, Steinmetz, Engle, Mestek, Pollock, Lehman, Jansen, Ying, Stambrook, Tischfield, and Yu.
Steven, N.M., Annels, N.E., Kumar, A., Leese, A.M., Kurilla, M.G., and Rickinson, A.B. Immediate early and early lytic cycle proteins are frequent targets of the Epstein-Barr virus–induced cytotoxic T cell response. 1605.
Stingl, G. *See* Strunk, Egger, Leitner, Hanau, and Stingl.
Stock, J.L. *See* Griffiths, Smith, Roach, Stock, Stam, Milici, Scampoli, Eskra, Byrum, Koller, and McNeish.
Strunk, D., Egger, C., Leitner, G., Hanau, D., and Stingl, G. A skin homing molecule defines the Langerhans cell progenitor in human peripheral blood. 1131.
Stuart, J.M. *See* Rosloniec, Brand, Myers, Whittington, Gumanovskaya, Zaller, Woods, Altmann, Stuart, and Kang.
Sullivan, J.L. *See* Pikora, Sullivan, Panicali, and Luzuriaga.
Sullivan, N. *See* Wu, Paxton, Kassam, Ruffing, Rottman, Sullivan, Choe, Sodroski, Newman, Koup, and Mackay.
Sun, H. *See* McEvoy, Sun, Frelinger, and Butcher.
— *See* McEvoy, Sun, Tsao, Cooke, Berliner, and Butcher.
Sun, S. *See* Tough, Sun, and Sprent.
Sundler, F. *See* Korsgren, Erjefält, Korsgren, Sundler, and Persson.
Süßmuth, R. *See* Mühlradt, Kieß, Meyer, Süßmuth, and Jung.
Sutterwala, F.S., Noel, G.J., Clynes, R., and Mosser, D.M. Selective suppression of interleukin-12 induction after macrophage receptor ligation. 1977.
Suzuki, H., Duncan, G.S., Takimoto, H., and Mak, T.W. Abnormal development of intestinal intraepithelial lymphocytes and peripheral natural killer cells in mice lacking the IL-2 receptor β chain. 499.
Swain, S.L. *See* Zhang, Brunner, Carter, Dutton, Rogers, Bradley, Sato, Reed, Green, and Swain.
Swier, K. *See* Brown, Swier, Moskowitz, Naujokas, Locksley, and Reiner.
Szabo, S.J., Dighe, A.S., Gubler, U., and Murphy, K.M. Regulation of the interleukin (IL)-12R β2 subunit expression in developing T helper 1 (Th1) and Th2 cells. 817.

T

Tachibana, K., Nakajima, T., Sato, A., Igarashi, K., Shida, H., Iizasa, H., Yoshida, N., Yoshie, O., Kishimoto, T., and Nagasawa, T. CXCR4/fusin is not a species-specific barrier in murine cells for HIV-1 entry. 1865.
Tada, Y., Ho, A., Matsuyama, T., and Mak, T.W. Reduced incidence and severity of antigen-induced autoimmune diseases in mice lacking interferon regulatory factor-1. 231.
Taguchi, O. *See* Doi, Takahashi, Taguchi, Azuma, and Obata.
Taher, T.E.I. *See* van der Voort, Taher, Keehnen, Smit, Groenink, and Pals.
Takagi, T. *See* Higashi, Moribe, Takagi, Sekido, Kawakami, Kikutani, and Kondoh.
Takahashi, T. *See* Doi, Takahashi, Taguchi, Azuma, and Obata.
Takano, T., Fiore, S., Maddox, J.F., Brady, H.R., Petasis, N.A., and Serhan, C.N. Aspirin-triggered 15-epi-lipoxin A_4 (LXA_4) and LXA_4 stable analogues are potent inhibitors of acute inflammation: evidence for anti-inflammatory receptors. 1693.
Takeda, Y. *See* Yamamoto, Takeda, Yamamoto, Kurazono, Imaoka, Yamamoto, Fujihashi, Noda, Kiyono, and McGhee.
Takimoto, H. *See* Suzuki, Duncan, Takimoto, and Mak.
Tang, Q. *See* Sciammas, Kodukula, Tang, Hendricks, and Bluestone.
Tannich, E. *See* Lotter, Zhang, Seydel, Stanley, and Tannich.
Tao, S.-Z. *See* Das, Mondragon, Tao, and Norin.
Tarakhovsky, A. Bar mitzvah for B-1 cells: how will they grow up? 981.
Tate, K.M. *See* Conboy, DeKruyff, Tate, Cao, Moore, Umetsu, and Jones.
Taylor, A.P., and Murray, H.W. Intracellular antimicrobial activity in the absence of interferon-γ: effect of interleukin-12 in experimental visceral leishmaniasis in interferon-γ gene-disrupted mice. 1231.
Taylor, G.P. *See* Goulder, Sewell, Lalloo, Price, Whelan, Evans, Taylor, Luzzi, Giangrande, Phillips, and McMichael.
Tedesco, F., Pausa, M., Nardon, E., Introna, M., Mantovani, A., and Dobrina, A. The cytolytically inactive terminal complement complex activates endothelial cells to express adhesion molecules and tissue factor procoagulant activity. 1619.
Teh, Y.-M., and Neuberger, M.S. The immunoglobulin (Ig)α and Igβ cytoplasmic domains are independently sufficient to signal B cell maturation and activation in transgenic mice. 1753.
ten Cate, J.W. *See* van der Poll, Levi, Dentener, Jansen, Coyle, Braxton, Buurman, Hack, ten Cate, and Lowry.
Terrazzano, G. *See* Carbone, Ruggiero, Terrazzano, Palomba, Manzo, Fontana, Spits, Kärre, and Zappacosta.
Thelen, M. *See* Forssmann, Uguccioni, Loetscher, Dahinden, Langen, Thelen, and Baggiolini.
Theobald, M., Biggs, J., Hernández, J., Lustgarten, J., Labadie, C., and Sherman, L.A. Tolerance to p53 by A2.1-restricted cytotoxic T lymphocytes. 833.
Thibodeau, J. *See* Delcourt, Thibodeau, Denis, and Sekaly.
Thiéblemont, N., and Wright, S.D. Mice genetically hyporesponsive to lipopolysaccharide (LPS) exhibit a defect in endocytic uptake of LPS and ceramide. 2095.
Thomas, A.W. *See* van der Wel, Tomás, Kocken, Malhotra, Janse, Waters, and Thomas.
Thomis, D.C., and Berg, L.J. Peripheral expression of Jak3 is required to maintain T lymphocyte function. 197.
Thotakura, R. *See* Patel, Kreider, Li, Li, Leung, Salcedo, Nardelli, Pippalla, Gentz, Thotakura, Parmelee, Gentz, and Garotta.
Tian, M., Broxmeyer, H.E., Fan, Y., Lai, Z., Zhang, S., Aronica, S., Cooper, S., Bigsby, R.M., Steinmetz, R., Engle, S.J., Mestek, A., Pollock, J.D., Lehman, M.N., Jansen, H.T., Ying, M., Stambrook, P.J., Tischfield, J.A., and Yu, L. Altered hematopoiesis, behavior, and sexual function in μ opioid receptor–deficient mice. 1517.
Tietz, W. *See* Borges, Tietz, Steegmaier, Moll, Hallmann, Hamann, and Vestweber.

Tiffany, H.L. *See* Gao, Wynn, Chang, Lee, Broxmeyer, Cooper, Tiffany, Westphal, Kwon-Chung, and Murphy.
Tilloy, F. *See* Lantz, Sharara, Tilloy, Andersson, and DiSanto.
Tipping, P.G. *See* Kitching, Holdsworth, Ploplis, Plow, Collen, Carmeliet, and Tipping.
Tischfield, J.A. *See* Tian, Broxmeyer, Fan, Lai, Zhang, Aronica, Cooper, Bigsby, Steinmetz, Engle, Mestek, Pollock, Lehman, Jansen, Ying, Stambrook, Tischfield, and Yu.
Tobery, T.W., and Siliciano, R.F. Targeting of HIV-1 antigens for rapid intracellular degradation enhances cytotoxic T lymphocyte (CTL) recognition and the induction of de novo CTL responses in vivo after immunization. 909.
Tomás, A.M. *See* van der Wel, Tomás, Kocken, Malhotra, Janse, Waters, and Thomas.
Tomlinson, S. *See* Yu, Abagyan, Dong, Gilbert, Nussenzweig, and Tomlinson.
Tough, D.F., Sun, S., and Sprent, J. T cell stimulation in vivo by lipopolysaccharide (LPS). 2089.
Tourigny, M.R., Mazel, S., Burtrum, D.B., and Petrie, H.T. T cell receptor (TCR)-β gene recombination: dissociation from cell cycle regulation and developmental progression during T cell ontogeny. 1549.
Tracey, K.J. *See* Zhang, Caragine, Wang, Cohen, Botchkina, Soda, Bianchi, Ulrich, Cerami, Sherry, and Tracey.
Tran, A.B. *See* Shaw, Lorens, Dhawan, DalCanto, Tse, Tran, Bonpane, Eswaran, Brocke, Sarvetnick, Steinman, Nolan, and Fathman.
Tran, T. *See* Shores, Tran, Grinberg, Sommers, Shen, and Love.
Trapani, J.A. *See* Shi, Mai, Israels, Browne, Trapani, and Greenberg.
Trembleau, S. *See* Harrison, Honeyman, Trembleau, Gregori, Gallazzi, Augstein, Brusic, Hammer, and Adorini.
Tresoldi, E. *See* Verani, Scarlatti, Comar, Tresoldi, Polo, Giacca, Lusso, Siccardi, and Vercelli.
Tripp, R.A., Hamilton-Easton, A.M., Cardin, R.D., Nguyen, P., Behm, F.G., Woodland, D.L., Doherty, P.C., and Blackman, M.A. Pathogenesis of an infectious mononucleosis-like disease induced by a murine γ-herpesvirus: role for a viral superantigen? 1641.
Tsao, B. *See* Hagenbaugh, Sharma, Dubinett, Wei, Aranda, Cheroutre, Fowell, Binder, Tsao, Locksley, Moore, and Kronenberg.
Tsao, P.S. *See* McEvoy, Sun, Tsao, Cooke, Berliner, and Butcher.
Tse, H.Y. *See* Shaw, Lorens, Dhawan, DalCanto, Tse, Tran, Bonpane, Eswaran, Brocke, Sarvetnick, Steinman, Nolan, and Fathman.
Tso, J.Y. *See* Smith, Tso, Clark, Cole, and Bluestone.
Tsuyuki, J. *See* Tsuyuki, Tsuyuki, Einsle, Kopf, and Coyle.
Tsuyuki, S., Tsuyuki, J., Einsle, K., Kopf, M., and Coyle, A.J. Costimulation through B7-2 (CD86) is required for the induction of a lung mucosal T helper cell 2 (TH2) immune response and altered airway responsiveness. 1671.
Tumas-Brundage, K., and Manser, T. The transcriptional promoter regulates hypermutation of the antibody heavy chain locus. 239.
Turner, E.M. *See* Sarraf, Frederich, Turner, Ma, Jaskowiak, Rivet, Flier, Lowell, Fraker, and Alexander.
Turner, H., and Cantrell, D.A. Distinct Ras effector pathways are involved in FcεR1 regulation of the transcriptional activity of Elk-1 and NFAT in mast cells. 43.

U

Udagawa, N., Horwood, N.J., Elliott, J., Mackay, A., Owens, J., Okamura, H., Kurimoto, M., Chambers, T.J., Martin, T.J., and Gillespie, M.T. Interleukin-18 (interferon-γ–inducing factor) is produced by osteoblasts and acts via granulocyte/macrophage colony-stimulating factor and not via interferon-γ to inhibit osteoclast formation. 1005.
Uguccioni, M. *See* Forssmann, Uguccioni, Loetscher, Dahinden, Langen, Thelen, and Baggiolini.
Uittenbogaart, C.H. *See* Perillo, Uittenbogaart, Nguyen, and Baum.
Ulrich, P. *See* Zhang, Caragine, Wang, Cohen, Botchkina, Soda, Bianchi, Ulrich, Cerami, Sherry, and Tracey.
Umetsu, D.T. *See* Conboy, DeKruyff, Tate, Cao, Moore, Umetsu, and Jones.
Ure, J.M. *See* Pascolo, Bervas, Ure, Smith, Lemonnier, and Pérarnau.
Utz, P.J., Hottelet, M., Schur, P.H., and Anderson, P. Proteins phosphorylated during stress-induced apoptosis are common targets for autoantibody production in patients with systemic lupus erythematosus. 843.

V

Vacchio, M.S., and Ashwell, J.D. Thymus-derived glucocorticoids regulate antigen-specific positive selection. 2033.
Valadon, P. *See* Nussbaum, Cleare, Casadevall, Scharff, and Valadon.
Valitutti, S., Müller, S., Salio, M., and Lanzavecchia, A. Degradation of T cell receptor (TCR)–CD3-ζ complexes after antigenic stimulation. 1859.
Vanbervliet, B. *See* Dubois, Vanbervliet, Fayette, Massacrier, Van Kooten, Brière, Banchereau, and Caux.
— *See* Fayette, Dubois, Vandenabeele, Bridon, Vanbervliet, Durand, Banchereau, Caux, and Brière.
Vandenabeele, S. *See* Fayette, Dubois, Vandenabeele, Bridon, Vanbervliet, Durand, Banchereau, Caux, and Brière.
van der Merwe, P.A., Bodian, D.L., Daenke, S., Linsley, P., and Davis, S.J. CD80 (B7-1) binds both CD28 and CTLA-4 with a low affinity and very fast kinetics. 393.
van der Poll, T., Levi, M., Dentener, M., Jansen, P.M., Coyle, S.M., Braxton, C.C., Buurman, W.A., Hack, C.E., ten Cate, J.W., and Lowry, S.F. Epinephrine exerts anticoagulant effects during human endotoxemia. 1143.
van der Voort, R., Taher, T.E.I., Keehnen, R.M.J., Smit, L., Groenink, M., and Pals, S.T. Paracrine regulation of germinal center B cell adhesion through the c-Met–hepatocyte growth factor/scatter factor pathway. 2121.
van der Wel, A.M., Tomás, A.M., Kocken, C.H.M., Malhotra, P., Janse, C.J., Waters, A.P., and Thomas, A.W. Transfection of the primate malaria parasite *Plasmodium knowlesi* using entirely heterologous constructs. 1499.
van Ewijk, W. *See* Pearson, van Ewijk, and McDevitt.
Van Kooten, C. *See* Dubois, Vanbervliet, Fayette, Massacrier, Van Kooten, Brière, Banchereau, and Caux.
van Kooten, C. *See* Flores-Romo, Björck, Duvert, van Kooten, Saeland, and Banchereau.
van Meerwijk, J.P.M., Marguerat, S., Lees, R.K., Germain, R.N., Fowlkes, B.J., and MacDonald, H.R. Quantitative impact of thymic clonal deletion on the T cell repertoire. 377.
van Oers, N.S.C. *See* Qian, Lev, van Oers, Dikic, Schlessinger, and Weiss.
Varki, A. *See* Krishna and Varki.
Velin, D., Fotopoulos, G., Luthi, F., and Kraehenbuhl, J.-P. The nasal-associated lymphoid tissue of adult mice acts as an entry site for the mouse mammary tumor retrovirus. 1871.
Verani, A., Scarlatti, G., Comar, M., Tresoldi, E., Polo, S., Giacca, M., Lusso, P., Siccardi, A.G., and Vercelli, D. C–C chemokines released by lipopolysaccharide (LPS)-stimulated human macrophages suppress HIV-1 infection in both macrophages and T cells. 805.
Vercelli, D. *See* Verani, Scarlatti, Comar, Tresoldi, Polo, Giacca, Lusso, Siccardi, and Vercelli.
Vergelli, M. *See* Hemmer, Fleckenstein, Vergelli, Jung, McFarland, Martin, and Wiesmüller.
Vestweber, D. *See* Borges, Tietz, Steegmaier, Moll, Hallmann, Hamann, and Vestweber.
von Boehmer, H. *See* Buer, Aifantis, DiSanto, Fehling, and von Boehmer.
— *See* Lanoue, Bona, von Boehmer, and Sarukhan.
von Brevern, M. *See* Erb, Rüger, von Brevern, Ryffel, Schimpl, and Rivett.
von der Weid, T. *See* Coffman and von der Weid.
von Herrath, M.G., and Oldstone, M.B.A. Interferon-γ is essential for destruction of β cells and development of insulin-dependent diabetes mellitus. 531.

W

Walker, M.R. *See* Lazdins, Grell, Walker, Woods-Cook, Scheurich, and Pfizenmaier.

Wang, H. *See* Zhang, Caragine, Wang, Cohen, Botchkina, Soda, Bianchi, Ulrich, Cerami, Sherry, and Tracey.
Wang, Z. *See* Karras, Wang, Huo, Howard, Frank, and Rothstein.
Warnock, M.L. *See* Corry, Folkesson, Warnock, Erle, Matthay, Wiener-Kronish, and Locksley.
Watanabe, T. *See* Yamanashi, Fukuda, Nishizumi, Inazu, Higashi, Kitamura, Ishida, Yamamura, Watanabe, and Yamamoto.
Watarai, M., Kamata, Y., Kozaki, S., and Sasakawa, C. rho, a small GTP-binding protein, is essential for *Shigella* invasion of epithelial cells. 281.
Waters, A.P. *See* van der Wel, Tomás, Kocken, Malhotra, Janse, Waters, and Thomas.
Webb, I.J. *See* Aiuti, Webb, Bleul, Springer, and Gutierrez-Ramos.
Wei, S.H.-Y. *See* Hagenbaugh, Sharma, Dubinett, Wei, Aranda, Cheroutre, Fowell, Binder, Tsao, Locksley, Moore, and Kronenberg.
Weih, F., Durham, S.K., Barton, D.S., Sha, W.C., Baltimore, D., and Bravo, R. p50–NF-κB complexes partially compensate for the absence of RelB: severely increased pathology in $p50^{-/-}$ $relB^{-/-}$ double-knockout mice. 1359.
Weijer, K. *See* Res, Blom, Hori, Weijer, and Spits.
Weis-Garcia, F. *See* Sawchuk, Weis-Garcia, Malik, Besmer, Bustin, Nussenzweig, and Cortes.
Weiss, A. *See* Qian, Lev, van Oers, Dikic, Schlessinger, and Weiss.
— *See* Wu, Zhao, Kurosaki, and Weiss.
Wekerle, H. *See* Neumann, Schmidt, Cavalié, Jenne, and Wekerle.
Wells, T.N.C. *See* Lloyd, Minto, Dorf, Proudfoot, Wells, Salant, and Gutierrez-Ramos.
— *See* Sica, Saccani, Borsatti, Power, Wells, Luini, Polentarutti, Sozzani, and Mantovani.
Welsh, R.M. *See* Zarozinski and Welsh.
Weltzien, H.U. *See* Preckel, Grimm, Martin, and Weltzien.
Weng, N.-p. *See* Palmer, Weng, Levine, June, Lane, and Hodes.
Wenger, R.H. *See* Liu, Wenger, Zhao, and Nielsen.
Westphal, H. *See* Gao, Wynn, Chang, Lee, Broxmeyer, Cooper, Tiffany, Westphal, Kwon-Chung, and Murphy.
Whelan, J.A. *See* Goulder, Sewell, Lalloo, Price, Whelan, Evans, Taylor, Luzzi, Giangrande, Phillips, and McMichael.
Whittington, K.B. *See* Rosloniec, Brand, Myers, Whittington, Gumanovskaya, Zaller, Woods, Altmann, Stuart, and Kang.
Wiener-Kronish, J.P. *See* Corry, Folkesson, Warnock, Erle, Matthay, Wiener-Kronish, and Locksley.
Wiertz, E.J.H.J. *See* Machold, Wiertz, Jones, and Ploegh.
Wiesmüller, K.-H. *See* Hemmer, Fleckenstein, Vergelli, Jung, McFarland, Martin, and Wiesmüller.
Wigley, F. *See* Casciola-Rosen, Wigley, and Rosen.
Wilkes, B.C. *See* Rajotte, Cadieux, Haman, Wilkes, Clark, Hercus, Woodcock, Lopez, and Hoang.
Wilkinson, M.F. *See* Li, Leonard, and Wilkinson.
Willis, A.C. *See* Davenport, Smith, Barouch, Reid, Bodnar, Willis, Hunt, and Hill.
Wilson, A. *See* Serdobova, Pla, Reichenbach, Sperisen, Ghysdael, Wilson, Freeman, and Nabholz.
Wilson, N. *See* Seibel, Wilson, Kozono, Marrack, and Kappler.
Winkler, G. *See* Billich, Winkler, Aschauer, Rot, and Peichl.
Winkler, T.H. *See* Mårtensson, Melchers, and Winkler.
Winzler, C., Rovere, P., Rescigno, M., Granucci, F., Penna, G., Adorini, L., Zimmermannn, V.S., Davoust, J., and Ricciardi-Castagnoli, P. Maturation stages of mouse dendritic cells in growth factor–dependent long-term cultures. 317.
Wohlenberg, C. *See* Schönbeck, Herzberg, Petersen, Wohlenberg, Gerdes, Flad, and Loppnow.
Wolitzky, B.A. *See* Kanwar, Bullard, Hickey, Smith, Beaudet, Wolitzky, and Kubes.
Wong, B. *See* Speiser, Lee, Wong, Arron, Santana, Kong, Ohashi, and Choi.
Woodcock, J.A. *See* Rajotte, Cadieux, Haman, Wilkes, Clark, Hercus, Woodcock, Lopez, and Hoang.
Woodland, D.L. *See* Tripp, Hamilton-Easton, Cardin, Nguyen, Behm, Woodland, Doherty, and Blackman.
Woods, A. *See* Rosloniec, Brand, Myers, Whittington, Gumanovskaya, Zaller, Woods, Altmann, Stuart, and Kang.
Woods-Cook, K. *See* Lazdins, Grell, Walker, Woods-Cook, Scheurich, and Pfizenmaier.
Wright, S.D. *See* Thiéblemont and Wright.
Wu, J., Zhao, Q., Kurosaki, T., and Weiss, A. The Vav binding site (Y315) in ZAP-70 is critical for antigen receptor–mediated signal transduction. 1877.
Wu, L., Paxton, W.A., Kassam, N., Ruffing, N., Rottman, J.B., Sullivan, N., Choe, H., Sodroski, J., Newman, W., Koup, R.A., and Mackay, C.R. CCR5 levels and expression pattern correlate with infectability by macrophage-tropic HIV-1, in vitro. 1681.
Wu, Y., Guo, Y., Huang, A., Zheng, P., and Liu, Y. CTLA-4–B7 interaction is sufficient to costimulate T cell clonal expansion. 1327.
Wülfing, C., Rabinowitz, J.D., Beeson, C., Sjaastad, M.D., McConnell, H.M., and Davis, M.M. Kinetics and extent of T cell activation as measured with the calcium signal. 1815.
Wynn, T.A. *See* Gao, Wynn, Chang, Lee, Broxmeyer, Cooper, Tiffany, Westphal, Kwon-Chung, and Murphy.

X

Xu, J. *See* Liu, Xu, de Bouteiller, Parham, Grouard, Djossou, de Saint-Vis, Lebecque, Banchereau, and Moore.

Y

Yamaguchi, M., Lantz, C.S., Oettgen, H.C., Katona, I.M., Fleming, T., Miyajima, I., Kinet, J.-P., and Galli, S.J. IgE enhances mouse mast cell FcεRI expression in vitro and in vivo: evidence for a novel amplification mechanism in IgE-dependent reactions. 663.
Yamamoto, M. *See* Yamamoto, Takeda, Yamamoto, Kurazono, Imaoka, Yamamoto, Fujihashi, Noda, Kiyono, and McGhee.
Yamamoto, S., Takeda, Y., Yamamoto, M., Kurazono, H., Imaoka, K., Yamamoto, M., Fujihashi, K., Noda, M., Kiyono, H., and McGhee, J.R. Mutants in the ADP-ribosyltransferase cleft of cholera toxin lack diarrheagenicity but retain adjuvanticity. 1203.
Yamamoto, T. *See* Yamanashi, Fukuda, Nishizumi, Inazu, Higashi, Kitamura, Ishida, Yamamura, Watanabe, and Yamamoto.
Yamamura, H. *See* Yamanashi, Fukuda, Nishizumi, Inazu, Higashi, Kitamura, Ishida, Yamamura, Watanabe, and Yamamoto.
Yamanashi, Y., Fukuda, T., Nishizumi, H., Inazu, T., Higashi, K.-i., Kitamura, D., Ishida, T., Yamamura, H., Watanabe, T., and Yamamoto, T. Role of tyrosine phosphorylation of HS1 in B cell antigen receptor-mediated apoptosis. 1387.
Yamazaki, K.-i. *See* Murakami, Nakajima, Yamazaki, Muraguchi, Serikawa, and Honjo.
Yang, J.C. *See* Bloom, Perry-Lalley, Robbins, Li, El-Gamil, Rosenberg, and Yang.
Yang, N. *See* Lan, Bacher, Yang, Mu, Nikolic-Paterson, Metz, Meinhardt, Bucala, and Atkins.
Yang, Q.-L. *See* Pon, Lussier, Yang, and Jennings.
Yang, X.-D. *See* Cope, Liblau, Yang, Congia, Laudanna, Schreiber, Probert, Kollias, and McDevitt.
Yap, G. *See* Scharton-Kersten, Yap, Magram, and Sher.
Yewdell, J.W. *See* Kerkau, Bacik, Bennink, Yewdell, Hünig, Schimpl, and Schubert.
Ying, M. *See* Tian, Broxmeyer, Fan, Lai, Zhang, Aronica, Cooper, Bigsby, Steinmetz, Engle, Mestek, Pollock, Lehman, Jansen, Ying, Stambrook, Tischfield, and Yu.
Yoshida, N. *See* Tachibana, Nakajima, Sato, Igarashi, Shida, Iizasa, Yoshida, Yoshie, Kishimoto, and Nagasawa.
Yoshie, O. *See* Tachibana, Nakajima, Sato, Igarashi, Shida, Iizasa, Yoshida, Yoshie, Kishimoto, and Nagasawa.
Yu, J., Abagyan, R., Dong, S., Gilbert, A., Nussenzweig, V., and Tomlinson, S. Mapping the active site of CD59. 745.
Yu, L. *See* Tian, Broxmeyer, Fan, Lai, Zhang, Aronica, Cooper, Bigsby, Steinmetz, Engle, Mestek, Pollock, Lehman, Jansen, Ying, Stambrook, Tischfield, and Yu.
Yuan, J. *See* Friedlander, Gagliardini, Hara, Fink, Li, MacDonald, Fishman, Greenberg, Moskowitz, and Yuan.

Z

Zaghouani, H. *See* Legge, Min, Potter, and Zaghouani.

Zaller, D.M. *See* Rosloniec, Brand, Myers, Whittington, Gumanovskaya, Zaller, Woods, Altmann, Stuart, and Kang.

Zamai, L. *See* Bennett, Zatsepina, Zamai, Azzoni, Mikheeva, and Perussia.

Zappacosta, S. *See* Carbone, Ruggiero, Terrazzano, Palomba, Manzo, Fontana, Spits, Kärre, and Zappacosta.

Zarozinski, C.C., and Welsh, R.M. Minimal bystander activation of CD8 T cells during the virus-induced polyclonal T cell response. 1629.

Zatsepina, O. *See* Bennett, Zatsepina, Zamai, Azzoni, Mikheeva, and Perussia.

Zeiher, A.M. *See* Dimmeler, Haendeler, Nehls, and Zeiher.

Zhang, M., Caragine, T., Wang, H., Cohen, P.S., Botchkina, G., Soda, K., Bianchi, M., Ulrich, P., Cerami, A., Sherry, B., and Tracey, K.J. Spermine inhibits proinflammatory cytokine synthesis in human mononuclear cells: a counterregulatory mechanism that restrains the immune response. 1759.

Zhang, S. *See* Tian, Broxmeyer, Fan, Lai, Zhang, Aronica, Cooper, Bigsby, Steinmetz, Engle, Mestek, Pollock, Lehman, Jansen, Ying, Stambrook, Tischfield, and Yu.

Zhang, T. *See* Lotter, Zhang, Seydel, Stanley, and Tannich.

Zhang, X., Brunner, T., Carter, L., Dutton, R.W., Rogers, P., Bradley, L., Sato, T., Reed, J.C., Green, D., and Swain, S.L. Unequal death in T helper cell (Th)1 and Th2 effectors: Th1, but not Th2, effectors undergo rapid Fas/FasL-mediated apoptosis. 1837.

Zhao, M. *See* Liu, Wenger, Zhao, and Nielsen.

Zhao, Q. *See* Wu, Zhao, Kurosaki, and Weiss.

Zheng, P. *See* Wu, Guo, Huang, Zheng, and Liu.

Zhong, G., Romagnoli, P., and Germain, R.N. Related leucine-based cytoplasmic targeting signals in invariant chain and major histocompatibility complex class II molecules control endocytic presentation of distinct determinants in a single protein. 429.

Zhong, X.-P. *See* Lauzurica, Zhong, Krangel, and Roberts.

Zhou, H. *See* Douhan, Lieberson, Knoll, Zhou, and Glimcher.

Zimmermann, V.S. *See* Winzler, Rovere, Rescigno, Granucci, Penna, Adorini, Zimmermann, Davoust, and Ricciardi-Castagnoli.

Zinkernagel, R.M. *See* Binder, Fehr, Hengartner, and Zinkernagel.

— *See* Ehl, Hombach, Aichele, Hengartner, and Zinkernagel.

— *See* Fehr, Bachmann, Bucher, Kalinke, Di Padova, Lang, Hengartner, and Zinkernagel.

— *See* Fehr, Schoedon, Odermatt, Holtschke, Schneemann, Bachmann, Mak, Horak, and Zinkernagel.

— *See* Karrer, Althage, Odermatt, Roberts, Korsmeyer, Miyawaki, Hengartner, and Zinkernagel.

SUBJECT INDEX VOLUME 185

9-O-acetylation, novel marker of CD4 T cells regulated during maturation and activation, 1997
Activator, of major histocompatibility complex class II genes, functions independently of class II transactivator, 1885
Adenosine triphosphate, intracellular concentrations cause distinction between apoptosis and necrosis, 1481
Adhesion
  of germinal center B cells, c-Met–hepatocyte growth factor is novel paracrine signaling pathway regulating, 2121
  novel vascular molecule involved in, of monocyte to aortic endothelium in atherogenesis, 2069
  required for activation of integrin-associated protein in costimulation of T cell, 1
  transendothelial migration blocked by soluble domain of platelet–endothelial cell adhesion molecule, 1349
Adhesion molecules, inactive terminal complement complex activates endothelial cells to express, 1619
ADP-ribosyltransferase, of cholera toxin, adjuvanticity but not diarrheagenicity retained by mutants in, 1203
AIDS, range of coreceptors for infection into $CD4^+$ T cells of HIV-1 associated with progression to, 621
Allergic bronchopulmonary aspergillosis inflammation, interleukin-10 suppresses cytokine production and, 1089
Allergic inflammation
  of endothelium, relationship between P-selectin, E-selectin and α_4-integrin in, 1077
  immunization and, in lungs and airways of B cell–deficient mice, 885
Alloreactive, cytotoxic T lymphocytes, peptide-independent recognition by, 1023
Amebiasis, antibody-mediated protection against invasive, 1793
Anti-antibodies, role of repetitive antigen patterns for induction of, 1785
Antibodies
  epitope location in *Cryptococcus neoformans* capsule in mice determines efficacy of, 685
  importance of transcription in variable (V) region mutation in B cells, 185
  nonmitogenic anti-CD3 monoclonal, deliver partial T cell receptor signal and induce clonal anergy, 1413
  protection against invasive amebiasis mediated by, 1793
  variable (V) region mutation in heavy chain locus, regulated by transcriptional promoter, 239
Antibody production, role of CD81 in CD19 expression in B cells and stimulation of, 1505
Anti-CD3, nonmitogenic monoclonal antibodies deliver partial T cell receptor signal and induce clonal anergy, 1413
Anticoagulant, epinephrine-exerted effects during human endotoxemia, 1143
Antigen
  immunodominant, of ultraviolet-induced regressor tumor, generated by somatic point mutation in coding region of nucleic acid helicase, 695
  role on types of CD4 memory T cells of persisting, 767
Antigen receptor, Vav binding site in ZAP-70 critical in signal transduction mediated by, 1877
Antigen recognition, by cytotoxic T lymphocyte clones specific for photoreactive peptide derivative, of epitope modification on TCR binding and, 629
Antigen-presenting cells
  downregulation of T cell receptor in conjugates of T cells and, 1859
  function of immunoglobulin-like transcript 3 as novel inhibitory receptor to regulate activation of, 1743
  mechanisms of sustained signaling and T cell activation, 1717
Antigens
  in vivo detection of dendritic cell presentation of, to $CD4^+$ T cells, 2133
  positive selection specific to, regulated by thymus-derived glucocorticoids, 2033
  repetitive patterns of, role in induction of anti-antibodies of, 1785
  targeting of, of HIV-1 for rapid degradation enhances cytotoxic T lymphocyte recognition and induction of CTL responses after immunization, 909
Antigen-specific tolerance, in $CD4^+$ T cells of mice, various conditions that induce, 405
Anti-γ-globulins, characterization and stimulation of rheumatoid factors or, 1717
Antimicrobial activity, interleukin-12 enhances interferon-γ-independent antileishmanial activity, 1231
Aorta, novel vascular molecule involved in monocyte adhesion to endothelium of, in atherogenesis, 2069
Apoptosis
  of $CD4^+$ T cells in HIV-infected individuals, roles of FasL and TNF in mediating macrophage-dependent, 55
  characterization of germinal center founder B cells in which onset of somatic mutation occurs after, 563
  cooperative roles of tumor necrosis factor receptors to regulate HIV production and induce, 81
  differential induction of, by Fas–Fas ligand interactions in human monocytes and macrophages, 1511
  intracellular concentrations of adenosine triphosphate cause distinction between necrosis and, 1481
  isoform of Neu differentiation factor identified using novel screen for dominant genes induced by, 1137
  in multiple sclerosis therapy, peptide affinity for MHC affects Th2 responses and, 583
  neuronal, mouse expressing interleukin-1β converting enzyme inhibitor prevents, induced by trophic factor withdrawal and ischemic brain injury, 933
  perforin initiates nuclear entry of granzyme B and the process of, 855
  proteins phosphorylated during, are targets for autoantibody production in patients with systemic lupus erythematosus, 843
  relationship of proteases to ceramide in TNF-α–induced pathway of, 481
  role of tyrosine phosphorylation of HS1 in B cell antigen receptor-mediated, 1387
  suppression by shear stress-mediated nitric oxide via inhibition of ICE-like and CPP-32–like proteases, 601
  of T cells, regulatory role of tumor necrosis factor receptor-associated factor TRAF in antigen-induced, 1777
  T helper cell effectors, Fas mediates unequal, 1837
Apoptosis, of thymocytes, endogenous lectin galectin-1 induces, 1851
  of thymocytes, new mouse gene *SRG3* required for glucocorticoid-induced, 1827
Arthritis
  autoimmune, T cell responses to mycobacterial heat-shock protein in regulation of, 1307
  characterization and stimulation of rheumatoid factors, 1717
  cyclophilin A in synovial fluids of patients with rheumatoid, 975
Arthritis, collagen-induced
  HLA-DR1 transgene mediates immune response to type II collagen in, 1113
  in 5-lipoxygenase–activating protein-deficient mice, role of leukotrienes on inflammatory response of, 1123
  mechanisms of T cell regulation involved in control of experimental autoimmune encephalomyelitis and, 1725
Aspergillus, interleukin-10 suppresses cytokine production and allergic bronchopulmonary inflammation due to infection by, 1089
Aspergillus exposure, in mice with chronic granulomatous disease, response to and abnormalities resulting from, 207
Aspirin, neutrophils and acute inflammation inhibited by novel lipoxin analogues triggered by, 1693
Asthma, lung-specific expression of interleukin-5 induces pathologic changes characteristic of, 2143
Atherogenesis, novel vascular molecule involved in monocyte adhesion to aortic endothelium in, 2069
ATP diphosphohydrolase, activation of endothelial cells causes loss of antithrombotic effects of, 153
Autoantibody production, in patients with systemic lupus erythematosus, proteins phosphorylated during apoptosis are targets for, 843
Autoantigens, in scleroderma, ischemia reperfusion-induced fragmentation of, focus metal-catalyzed oxidation reactions, 71
Autoimmune disease
  in anti-RBC autoantibody transgenic mice, bacterial infections trigger expansion of B-1 cells and onset of, 791
  chronic tumor necrosis factor alters T cell responses by attenuating T cell receptor signaling, 1573
  combinatorial libraries of peptides as tool to identify cross-reactive ligands for autoreactive T cells, 1651
  in humans, direct analysis of Fas-sensitive autoreactive T cells in multiple sclerosis, 1585
  interleukin-4 delivered by retrovirus-transduced T cells reduces severity of, 1711

mechanisms of T cell regulation involved in control of experimental autoimmune encephalomyelitis and collagen II–induced arthritis, 1725
misconceptions about understanding, via experiments with cytokine knockouts, 2039
molecular mimicry and T cell–mediated, 1529
necrosis factor-α and lymphotoxin-α not required for development of experimental autoimmune encephalomyelitis, 2177
role of interferon regulatory factor-1 in promoting inflammation and autoimmunity in collagen-induced arthritis and allergic encephalomyelitis in mice, 231
Autoimmune-type disorders, in mice, MHC-controlled expression of IL-4 causes, 329
Autoimmunity, self–major histocompatibility complex $CD4^+$ T cells inhibit T helper cell 2-mediated, 1769
B7, interaction with CTLA-4 to positively regulate activation of T cells, 1327
B7-2, role in induction of mucosal T helper cell 2 immune response and altered airway responsiveness, 1671
B cell antigen receptor, Igα and Igβ are independently sufficient to mediate functions of, 1753
B cells
chronic lymphocytic leukemia, lack of allelic exclusion in, 1435
c-Met–hepatocyte growth factor is novel paracrine signaling pathway regulating adhesion of, 2121
critical role of secondary lymphoid organs to induce, in antiviral immune response, 2157
dendritic cells enhance immunoglobulin secretion and growth and differentiation of, activated by, 941
dendritic cells regulate maturation of, 801
differential regulation of anti–double-stranded DNA and determination of fate of, 1317
germinal center founder, characterization of, in which apoptosis occurs before onset of somatic mutation, 563
growth and differentiation of, modulated by dendritic cells by inducing isotype switch to immunoglobulin A , 1909
Igα and Igβ are independently sufficient to mediate antigen receptor functions of, 1753
immunization and allergic inflammation in lungs and airways of mice deficient in, 885
importance of transcription in variable (V) region mutation in, 185
in inflammatory phenotype, p50-containing complexes compensate for absence of RelB, 1359
MHC-controlled expression of interleukin (IL)-4 leads to hyperactivity of, 329
proliferation and immunoglobulin synthesis by, induced by forms of signaling lymphocytic activation molecule, 993
role of CD81 in CD19 expression and stimulation of antibody production, 1505
role of NF-κB in production of immunoglobulin and development and function of, 953
role of tyrosine phosphorylation of HS1 in apoptosis mediated by antigen receptor of, 1387
signal transducer and activator of transcription-3 protein constitutively activated in B-1 cells but only inducibly expressed in conventional B-2 cells, 1035
superantigen drives extrafollicular and follicular differentiation of, leading to virus-specific antibody production, 551
V(D)J recombination induced by immunoglobulin gene products during development of, 609
B-1 cells
bacterial infections trigger onset of autoimmune disease in anti-RBC autoantibody transgenic mice and expansion of, 791
roles of CD5 and signal transducer and activator of transcription proteins to regulate development and activation of, 981
B lymphoid, transgenic marker for precursors of, which express human CD25, 653
Bacterial endotoxin, purinergic modulation of interleukin-1β release from microglial cells stimulated with, 579
Bacterial infections, trigger expansion of B-1 cells and onset of autoimmune disease in anti-RBC autoantibody transgenic mice, 791
Bacterial lipopolysaccharide, chemokine receptor expression in human monocytes inhibited by, 969
Bactericidal capsular epitope, group B meningococcal polysaccharide mimics, 1929
Bhsp65, T cell responses to mycobacterial heat-shock protein in regulation of autoimmune arthritis, 1307
Binding
of CD80 to CD28 and CTLA-4, with low affinity and fast kinetics, 393
Fas to its ligand, identification of amino acid residues important for, 1487
HLA class I motifs derived from peptides vary at COOH terminus, 367
of novel tumor surface protein with naive natural killer cells, 1735
Biosynthesis, human immunodeficiency virus-1 Vpu protein interferes with major histocompatibility complex molecule, 1295
Blood
expression of skin homing receptor on Langerhans cell precursors in human peripheral, 1131
identification of precursor population of T cells in human peripheral, 875
Blood–lymph translocation, via hepatic sinusoids is pathway for rat dendritic cells, 777
Bone marrow aplasia, role of interferon-α/β during infection induced by noncytopathic lymphocytic choriomeningitis virus on, 517
Brain injury, in mice, interleukin-1β converting enzyme inhibitor prevents neuronal apoptosis induced by trophic factor withdrawal and ischemic, 933
Bystander activation, in transgenic mice, mechanism and evaluation of, of cytotoxic T cell, 1241
Calcium, role in macrophage receptor-mediated inhibition of interleukin-12 induction, 1977
Calcium signal, kinetics and extent of T cell activation as measured with, 1815
Cancer, tyrosinase-related protein 2 as rejection antigen for B16 melanoma, 453
Carcinoembryonic antigens, CD66 family members serve as receptors for opacity proteins during gonorrhea infection, 1557
Cataracts, induced by transforming growth factor-β in rats, estrogen protects lenses against, 273
CBF/PEBP2, role of transcription factor in regulation of T cell receptor-δ gene to activate VDJ recombination, 1193
CCR5, infectability by macrophage-tropic human immunodeficiency virus-1 correlates with levels and expression of, 1681
CD1, functional maturation of human T cells marked by downregulation of, 141
CD3, T cells found in, react with self–major histocompatibility complex molecules upon restoration of normal density of T cell receptor–CD3 complex, 707
CD4
9-O-acetylation of sialomucins is novel marker of T cells regulated during maturation and activation, 1997
associated with $p56^{lck}$ activation mechanism in T cell receptor domain, 121
biological and biochemical consequence is to control agonist properties of peptide–MHC molecule ligands when limiting the interaction of TCR with, 219
memory T cells, CD45RC isoforms define two types of, role of persisting antigen on, 767
relationship between CXCR4 and, as barrier for human immunodeficiency virus-1, 1865
temporal asymmetry in maturation of CD8 and, 357
$CD4^+$
in HIV-1, range of coreceptors for infection into, associated with progression to AIDS, 621
in vivo detection of dendritic cell antigen presentation to T cells, 2133
role of invariant chain in differentiation of T helper cells during murine infection of mice, 31
$CD4^+$ T cells
IL-6 induces initial production of IL-4 in, 461
macrophage-induced apoptosis of, mediated by FasL and TNF, in HIV-infected individuals, 55
in mice, various conditions that induce antigen-specific tolerance in, 405
role of cytokine receptor γ chain to control lymphoid homeostasis by regulating fate of, 189
telomere length and activity and replicative potential of $CD8^+$ and, infected with human immunodeficiency virus-1, 1381
CD5, development and activation of B-1 cells is regulated by signal transducer and activator of transcription proteins and, 981
CD8
minimal bystander activation of, during virus-induced polyclonal T cell response, 1629
temporal asymmetry in maturation of CD4 and, 357
$CD8^+$, naive T cells, requirements for peptide-induced T cell receptor downregulation on, 641
$CD8^+$ T cells, telomere length and activity and replicative potential of $CD4^+$ and, infected with human immunodeficiency virus-1, 1381
CD19, in B cells, role of CD81 in expression of, 1505
CD25, human, transgenic marker for mouse B lymphoid precursors which express, 653
CD28
associations of CD80 and CD86 with, in T cell activation and inflammatory response, 177
binds to CD80 with low affinity and fast kinetics, 393
roles of B7, HSA and, as costimulatory pathways for induction of effector and memory T cells, 251

CD34+
cells, in human, mutant *N-RAS* induces erythroid lineage dysplasia in, 1337
hematopoietic cell development of dendritic cells, role of CD40 on human cord blood, 341
human hematopoietic progenitor cells, chemokine SDF-1 attracts and is associated with mobilization of, 111
CD40
dendritic cells enhance immunoglobulin secretion and growth and differentiation of B cells activated by, 941
growth and differentiation of B cells activated by, modulated by dendritic cells by inducing isotype switch to immunoglobulin A , 1909
role of, on human cord blood CD34+ hematopoietic cell development of dendritic cells, 341
role of interaction of CD40 ligand to, in cytotoxicity activation of natural killer cells, 2053
CD40-ligand, plasmacytoid T cells are precursors of dendritic cells with interleukin-3 and, 1101
CD43, target for manipulation of lymphocyte traffic and regulation of T cell distribution, 1493
CD47, integrin-associated protein, structure-function relationships in signaling of, adhesion-dependent and CD-28 independent costimulation of T cell by, 1
CD59
active site map and function of, inhibitor of cytolytic membrane attack complex of complement, 745
complement-inhibitory glycoprotein, mutational analysis of active site and antibody epitopes of, 507
CD66, carcinoembryonic antigens serve as receptors for opacity proteins during gonorrhea infection, 1557
CD80
association with CD28 in T cell activation and inflammatory response, 177
binds CD28 and CTLA-4 with low affinity and fast kinetics, 393
CD81, not required for T cell maturation but important for CD19 expression in B cells and stimulation of antibody production, 1505
CD86, role in induction of mucosal T helper cell 2 immune response and altered airway responsiveness, 1671
CD94, covalently associated with NKG2A defines novel inhibitory natural killer cell receptor, 795
CD95
identification of amino acid residues important for ligand binding to, 1487
in human monocytes and macrophages, differential induction of apoptosis by interactions of Fas ligand with, 1511
cDNA, molecular and functional characterization of novel human chemokines as inhibitors of myeloid progenitors, 1163
Cell cycle, gene recombination and developmental progression and regulation of, of T cells in thymus, 1549
Cell death
differential induction of apoptosis by Fas–Fas ligand interactions in human monocytes and macrophages, 1511
Fas-mediated unequal apoptosis in T helper cell effectors, 1837
intracellular concentrations of adenosine triphosphate cause distinction between apoptosis and necrosis, 1481
regulation of cell cycle and developmental progression of T cells in thymus, 1549
of thymocytes, endogenous lectin galectin-1 induces, 1851
β cells, role of IFN-γ in destruction of, leading to insulin-dependent diabetes mellitus, 531
Ceramide
relationship with proteases in TNF-α–induced pathway of apoptosis, 481
role of lipopolysaccharide in endocytic uptake of, 2095
Cervix, of infected women, HIV-1 induces cytotoxic T lymphocytes in, 293
Chemoattractant, macrophage-derived chemokine is, for monocytes, dendritic cells and natural killer cells, 1595
Chemokine
induced by lipopolysaccharide, human immunodeficiency virus-1 infection in macrophages and T cells is suppressed by, 805
isolation of novel monocyte chemoattractant protein-5 in mice with structural and functional similarities to human MCP-1, 99
macrophage-derived, novel chemoattractant for monocytes, dendritic cells and natural killer cells, 1595
MCP-1 and RANTES in renal inflammation and interstitial fibrosis, 1371
molecular and functional characterization of, as inhibitors of myeloid progenitors, 1163
novel eotaxin-2 selective for CCR3 acts like eotaxin on human eosinophil and basophil leukocytes, 2171
receptor expression in human monocytes inhibited by bacterial lipopolysaccharide, 969
role of eotaxin in eosinophil recruitment in mice, 785
stromal cell-derived factor-1 attracts and is associated with mobilization of CD34+ hematopoietic progenitor cells in humans, 111
Chemokine receptor–like, novel STRL33, protein functions as fusion cofactor for diverse human immunodeficiency virus-1 strains, 2015
Chemokine receptors
CC receptor 1, function in hematopoiesis, host defense, inflammation and cytokine balance, 1959
CCR3, novel CC chemokine eotaxin-2 selective for, acts like eotaxin on human eosinophil and basophil leukocytes, 2171
CCR5 levels and expression correlate with infectability by macrophage-tropic human immunodeficiency virus-1, 1681
expression in human monocytes inhibited by bacterial lipopolysaccharide, 969
Cholera toxin, adjuvanticity but not diarrheagenicity retained by ADP-ribosyltransferase mutants of, 1203
Chromosomes, two loci control resistance to *Leishmania*, 1705
Chronic granulomatous disease, in mice, response to and abnormalities resulting from *Aspergillus* exposure, effects of absence of a respiratory burst in, 207
Chronic lymphocytic leukemia, lack of allelic exclusion in B cell, 1435
Cleavage, 12/23-dependent, of RAG by whole cell extract and DNA-bending proteins in V(D)J recombination, 2025
Clonal anergy, nonmitogenic anti-CD3 monoclonal antibodies deliver partial T cell receptor signal and induce, 1413
Clonal expansion, CTLA-4 interacts with B7 to positively regulate activation of T cells, 1327
C-Met–hepatocyte growth factor, novel paracrine signaling pathway regulating germinal center B cell adhesion, 2121
Collagen, type II, in autoimmune arthritis, HLA-DR1 transgene mediates immune response to, 1113
Collagen II, mechanisms of T cell regulation involved in control of experimental autoimmune encephalomyelitis and arthritis induced by, 1725
Complement, active site map and function of CD59, inhibitor of cytolytic membrane attack complex of, 745
Complement complex, inactive terminal, activation of endothelial cells to express adhesion molecules and tissue factor procoagulant activity by, 1619
Complement receptor 3, regulation of interleukin-12 production by signaling of, 1987
Complement-inhibitory glycoprotein, mutational analysis of active site and antibody epitopes of CD59, 507
CR2/CD21, follicular dendritic cells specifically express the long form of, 165
Crescentic nephritis, role of monocyte chemoattractant protein-1 in interstitial fibrosis and, 1371
Cross-reactive ligands, for autoreactive T cells, combinatorial libraries of peptides as tool to identify, 1651
Cryptococcus neoformans, in mice, antibody efficacy determined by epitope location in capsule of, 685
CTLA-4
binds to CD80, with low affinity and fast kinetics, 393
interaction with B7 to positively regulate activation of T cells, 1327
CXCR4, not a species-specific barrier in murine cells for human immunodeficiency virus-1 entry, 1865
Cyclophilin A, in synovial fluids of patients with rheumatoid arthritis, 975
Cysteine protease protein-32, suppression of apoptosis by shear stress-mediated nitric oxide via inhibition of ICE-like proteases and, 601
Cytokine balance, function of CC chemokine receptor 1 in hematopoiesis, host defense, inflammation and, 1959
Cytokine receptor γ chain, role of to control lymphoid homeostasis by regulating fate of CD4+ T cells, 189
Cytokine response modifier A, inhibits ceramide in TNF-α–induced pathway of apoptosis, 481
Cytokines
abnormal development of intestinal intraepithelial lymphocytes and natural killer cells in mice lacking IL-2 receptor β chain, 499
behavior of visceral *Leishmania donovani* infection in response model of T helper cells, 867
during murine cytomegalovirus infection, characterization of early responses of glucocorticoids and, 1185
in human mononuclear cells, spermine inhibits proinflammatory synthesis of, 1759
IL-4 and IFN-γ modify receptor subunit of interleukin-12 during development of T helper cells, 817
IL-6 induces initial production of IL-4 in CD4+ T cells, 461
in inbred mice, genetic regulation of T helper cell production and encephalitogenicity, 439
increase levels of leptin in mice, role in inflammatory anorexia, 171
infectious mononucleosis-like disease induced by viral superantigen and, 1641

inhibition of interleukin-12 induction mediated by macrophage receptor, 1977
interleukin-10 suppresses allergic bronchopulmonary aspergillosis inflammation and production of, 1089
lung-specific expression of interleukin-5 induces pathologic changes characteristic of asthma, 2143
misconceptions about understanding autoimmune disease via experiments with knockouts of, 2039
regulatory roles of IL-4 and IL-6 to induce development of Th2 cells, 373
roles of interferon and tumor necrosis factor to regulate MHC expression in mature brain neurons, 305
selective expression and regulation of interleukin-12 receptor subunit during Th1/Th2 differentiation, 825
T helper cell 2 immune response against non-self antigens modifies cytokines of autoimmune T cells and protects against experimental allergic encephalomyelitis, 901
Cytomegalovirus, in human, gene products US11 and US2 differ in abilities to attack MHC class I heavy chains, 363
Cytotoxic T cells
early lytic cycle proteins are frequent targets of response of, induced by Epstein-Barr virus, 1605
in transgenic mice, mechanism and evaluation of bystander activation of, 1241
Cytotoxic T lymphocytes
alloreactive, peptide-independent recognition by, 1023
A2.1-restricted, tolerance to p53 by, 833
dissimilar responses of identical human histocompatibility leukocyte antigens in HIV-infected siblings, 1423
enhanced *Listeria* peptide dissociation from major histocompatibility complex molecules in immune defenses of, 1403
envelope-specific responses in infants vertically infected with human immunodeficiency virus-1, 1153
haptens antagonize trinitrophenyl-specific, 1803
massive virus-specific response to lymphocytic choriomeningitis virus by, 1629
responses and education in HLA-A2.1–restricted transgenic mice, 2043
specific for photoreactive peptide derivative, effects of epitope modification on TCR binding and antigen recognition by, 629
targeting antigens of HIV-1 for rapid degradation enhances recognition of, and induction of CTL responses after immunization, 909
Cytotoxicity
of natural killer cells in mice, Ly-49A interrupts early signaling events in, 673
role of CD40–CD40 ligand interaction in activation of, in natural killer cells, 2053
Dendritic cells
B cell growth and differentiation modulated by, by inducing isotype switch to immunoglobulin A, 1909
function of immunoglobulin-like transcript 3 as novel inhibitory receptor during antigen processing expressed on, 1743
immunoglobulin secretion and growth and differentiation of CD40-activated B cells enhanced by, 941
with interleukin-3 and CD40-ligand, plasmacytoid T cells are precursors of, 1101
in vivo detection of antigen presentation to $CD4^+$ T cells by, 2133
induce negative but not positive selection of T cells in vivo via targeted expression of MHC class II molecules, 541
macrophage-derived chemokine is chemoattractant for, 1595
of mice, characterization of maturation stages in growth factor–dependent cultures, 317
in rat, blood–lymph translocation via hepatic sinusoids is pathway for, 777
regulation of B cell maturation by, 801
role of CD40 on human cord blood $CD34^+$ hematopoietic cell development of, 341
Diabetes mellitus, role of IFN-γ in destruction of β cells and development of insulin-dependent, 531
Diarrhea, mutants in ADP-ribosyltransferase of cholera toxin retain adjuvanticity and lack, 1203
DNA, determination of fate of B cells and differential regulation of anti–double-stranded, 1317
DNA-bending proteins, 12/23-dependent cleavage of RAG by whole cell extract and, in V(D)J recombination, 2025
Double-stranded DNA, determination of fate of B cells and differential regulation of anti–, 1317
Downregulation
of mRNA, nuclear-associated mechanism using T cell receptor-β mini-gene in response to premature termination codons for, 985
requirements for, of peptide-induced T cell receptor, on naive $CD8^+$ T cells, 641
Dysentery, GTP-binding protein, rho, is required for *Shigella* to invade epithelial cells and cause, 281
Dysplasia, of erythroid lineage, induced by mutant *N-RAS* in human $CD34^+$ cells, 1337
Early growth response, in mice, induction of family of transcriptional regulators during thymic selection, 731
Effector T cells, roles of CD28, B7 and HSA costimulatory pathways for induction of memory and, 251
Egr-1, PMA/PHA-stimulated transcriptional synergy mediated by NF-κB and, role in T cell development, 491
Elf-1, binding localization and participation in interleukin-2 responsiveness in mouse interleukin-2 receptor α gene, 1211
Encephalitis, T cell receptor-γ/δ cells protect mice from herpes simplex virus-1–induced, 1969
Encephalitogenicity, in inbred mice, genetic regulation of T helper cytokine production and, 439
Encephalomyelitis
experimental autoimmune, interleukin-4 delivered by retrovirus-transduced T cells reduces severity of, 1711
tumor necrosis factor-α and lymphotoxin-α not required for development of experimental autoimmune, 2177
Endocyte, role of lipopolysaccharide in uptake by, of lipopolysaccharide and ceramide, 2095
Endocytic presentation, of peptide analogue broadly antagonizes T cells, 1043
Endothelial cells
antithrombotic effects of ATP diphosphohydrolase activity are lost after activation of, 153
inactive terminal complement complex activates, to express adhesion molecules and tissue factor procoagulant activity, 1619
Endothelial venules, CD43 is target for manipulation of lymphocyte traffic and regulation of T cell distribution via high, 1493
Endothelium
novel vascular molecule involved in monocyte adhesion to, of aorta in atherogenesis, 2069
relationship between P-selectin, E-selectin and α_4-integrin in allergic inflammation of, 1077
transendothelial migration blocked by soluble domain of platelet–endothelial cell adhesion molecule, 1349
Endotoxemia, in humans, epinephrine exerts anticoagulant effects during, 1143
Enhancer, α, of T cell receptor, development of VDJ recombination in mice regulated by, 131
Entamoeba, identification of lectin epitope on, conferring antibody-mediated protection against invasive amebiasis, 1793
Eosinophilia, in mice, role of chemokine eotaxin in, 785
Eotaxin
novel CC chemokine eotaxin-2 selective for CCR3 acts like, on human eosinophil and basophil leukocytes, 2171
role in eosinophil recruitment in mice of, 785
Epinephrine, exerts anticoagulant effects during human endotoxemia, 1143
Epithelial cells, GTP-binding protein, rho, is required for dysentery-causing *Shigella* to invade, 281
Epstein-Barr virus, early lytic cycle proteins are frequent targets of cytotoxic T cell response induced by, 1605
Erythroid, dysplasia in human $CD34^+$ cells induced by mutant *N-RAS*, 1337
Estrogen, protects lenses against cataracts induced by transforming growth factor-β in rats, 273
Experimental allergic encephalomyelitis, T helper cell 2 immune response against non-self antigens modifies cytokines of autoimmune T cells and protects against, 901
Experimental autoimmune encephalomyelitis
interleukin-4 delivered by retrovirus-transduced T cells reduces severity of, 1711
mechanisms of T cell regulation involved in control of collagen II–induced arthritis and, 1725
misconceptions about understanding autoimmune disease via experiments with cytokine knockouts, 2039
tumor necrosis factor-α and lymphotoxin-α not required for development of, 2177
Extramedullary hematopoiesis, in mice, soluble receptor of interleukin-6 activates expression of gp130 to stimulate, 755
Fas
identification of amino acid residues important for ligand binding to, 1487
in human monocytes and macrophages, differential induction of apoptosis by interactions of Fas ligand with, 1511
in multiple sclerosis in humans, direct analysis of autoreactive T cells sensitive to, 1585
unequal apoptosis in T helper cell effectors mediated by, 1837
FasL, role in mediating macrophage-induced apoptosis of $CD4^+$ T cells in HIV-infected individuals, 55
FcεR1
immunoglobulin E enhances expression in mouse mast cells of, 663
mast cell activation by, role of Ras in regulation of, 43

Fibrosis, role of monocyte chemoattractant protein-1 in crescentic nephritis and interstitial, 1371
Focal adhesion kinase
RAFTK phosphorylates and associates with signaling molecules upon activation of T cells, 1055
tyrosine phosphorylation of Pyk is regulated by Fyn during signaling of T cell receptors, 1253
Follicle, development of lymphoid structure of, required for immunoglobulin G response supported by lymphotoxin-α, 2111
Follicular dendritic cells, long CR2/CD21 isoform is specifically expressed by, 165
Food poisoning, transcytosis of superantigen toxins of *Staphylococcus*, 1447
Fusion cofactor, novel chemokine receptor–like protein functions as, for diverse strains of human immunodeficiency virus-1, 2015
Fyn, tyrosine phosphorylation of Pyk is regulated by, during signaling of T cell receptors, 1253
Galectin-1, endogenous lectin induces thymocyte apoptosis, 1851
Gene therapy, interleukin-4 delivered by retrovirus-transduced T cells reduces severity of autoimmune disease, 1711
Genes, isoform of Neu differentiation factor identified using novel screen for dominant apoptosis-inducing, 1137
Genetic mapping, two loci control resistance to *Leishmania*, 1705
Genetic regulation, in inbred mice, T helper cytokine production via, 439
Germinal center founder B cells, characterization of, in which apoptosis occurs before onset of somatic mutation, 563
Glomerulonephritis
pathogenic role of macrophage migration inhibitory factor in rats with, 1455
plasminogen protects against renal injury in crescentic, 963
Glucocorticoids
derived in thymus, antigen-specific positive selection regulated by, 2033
during murine cytomegalovirus infection, characterization of early responses of interleukins and, 1185
new mouse gene *SRG3* required for thymocyte apoptosis induced by, 1827
Glycoprotein, mutational analysis of active site and antibody epitopes of complement-inhibitory CD59, 507
Gonorrhea, CD66 carcinoembryonic antigens serve as receptors for opacity proteins during infection of, 1557
gp130, soluble receptor of interleukin-6 activates expression of, to stimulate extramedullary hematopoiesis in mice, 755
Granulocyte/macrophage colony-stimulating factor
crucial role of R280 in ligand recognition of receptor α chain of, 1939
mechanism of interleukin-18 to inhibit osteoclast formation, 1005
Granzyme B, crosses cell membrane autonomously, perforin initiates nuclear entry of, 855
Group B meningococcal polysaccharide, mimics bactericidal capsular epitope, 1929
Growth factor, characterization of maturation stages of mouse dendritic cells in cultures dependent on, 317
GTP-binding protein, rho is required for dysentery-causing *Shigella* to invade epithelial cells, 281
Haptens, trinitrophenyl-specific cytotoxic T cells antagonized by, 1803
Heat-shock protein, T cell responses to, in regulation of autoimmune arthritis, 1307
Helicase, immunodominant antigen of ultraviolet-induced regressor tumor generated by somatic point mutation in coding region of nucleic acid, 695
Hematopoiesis
function of CC chemokine receptor 1 in host defense, inflammation, cytokine balance and, 1959
role of μ opioid receptor in, and reproductive physiology in mice, 1517
Hepatic sinusoids, blood–lymph translocation via, pathway for rat dendritic cells, 777
Herpes simplex virus, use of synthetic peptides to define active site of early protein ICP47, 1565
Herpes simplex virus-1
in mice, role of nitric oxide in pneumonia induced by, 1533
T cell receptor-γ/δ cells protect mice from lethal encephalitis induced by, 1969
Herpesvirus, pathogenesis of infectious mononucleosis-like disease induced by, 1641
High endothelial venules, CD43 is target for manipulation of lymphocyte traffic and regulation of T cell distribution via, 1493
Histocompatibility leukocyte antigens
HIV-infected siblings exhibit dissimilar cytotoxic T lymphocyte responses of identical, 1423
in human, direct binding of p58 killer cell inhibitory receptor to, is peptide-selective, 1523
HLA
class I binding motifs of, derived from peptides, vary at COOH terminus, 367
isotype-specific activator of major histocompatibility complex class II genes functions independently of class II transactivator, 1885
HLA-A2.1, education and cytotoxic T lymphocyte responses in transgenic mice restricted by, 2043
HLA-DR1 transgene, mediates immune response to type II collagen in rheumatoid arthritis, 1113
HLA-G, inhibits expression of natural killer cells during pregnancy, 385
Homeostasis, roles of nuclear factor and Rel complexes in T cell development and, 1897
Hormone, role of estrogen to protect lenses against cataracts induced by transforming growth factor-β in rats, 273
Host defense, function of CC chemokine receptor 1 in hematopoiesis, inflammation, cytokine balance and, 1959
HS1, role of tyrosine phosphorylation in B cell antigen receptor-mediated apoptosis, 1387
HSA, roles of B7, CD28 and, as costimulatory pathways for induction of effector and memory T cells, 251
Human
CD1 marks functional maturation and defines control point in late stages of development of T cells in, 141
chemokine receptor expression in monocytes inhibited by bacterial lipopolysaccharide, 969
chemokine SDF-1 attracts and is associated with mobilization of $CD34^+$ hematopoietic progenitor cells in, 111
epinephrine exerts anticoagulant effects during endotoxemia, 1143
expression of skin homing receptor on Langerhans cell precursors in peripheral blood of, 1131
histocompatibility leukocyte antigen-G inhibits expression of natural killer cells during pregnancy, 385
identification of precursor population of T cells in peripheral blood of, 875
molecular and functional characterization of novel chemokines as inhibitors of myeloid progenitors, 1163
nonpeptidic antagonist regulates response of lymphocyte ligands in, 91
role of CD40 on cord blood $CD34^+$ hematopoietic cell development of dendritic cells, 341
signaling lymphocytic activation molecule induce proliferation and immunoglobulin synthesis by B cells, 993
spermine inhibits proinflammatory cytokine synthesis in mononuclear cells in, 1759
vascular smooth muscle cells express interleukin-1β–converting enzyme inhibitory activity, 1287
Human cytomegalovirus, gene products US11 and US2 differ in abilities to attack MHC class I heavy chains, 363
Human FDC-specific molecule, first characterization of long isoform of CR2/CD21, 165
Human immunodeficiency virus
cooperative roles of tumor necrosis factor receptors to induce apoptosis and regulate, 81
macrophage-induced apoptosis of $CD4^+$ T cells mediated by FasL and TNF, 55
Human immunodeficiency virus-1
CXCR4 is not a species-specific barrier in murine cells for entry of, 1865
dissimilar cytotoxic T lymphocyte responses of identical histocompatibility leukocyte antigens in siblings infected with, 1423
envelope-specific cytotoxic T lymphocyte responses in infants vertically infected with, 1153
induces cytotoxic T lymphocytes in cervix of infected women, 293
in macrophages and T cells, chemokines released by lipopolysaccharide suppress infection of, 805
macrophage-tropic, CCR5 levels and expression correlate with infectability by, 1681
novel chemokine receptor–like protein functions as fusion cofactor for diverse strains of, 2015
range of coreceptors for infection into $CD4^+$ T cells of, associated with progression to AIDS, 621
targeting antigens of, for rapid degradation enhances cytotoxic T lymphocyte recognition and induction of CTL responses after immunization, 909
telomere length, telomerase activity and replicative potential of $CD4^+$ and $CD8^+$ T cells infected with, 1381
Vpu protein interferes with major histocompatibility complex molecule biosynthesis, 1295
Human MCP-1, isolation of novel monocyte chemoattractant protein-5 in mice with structural and functional similarities to, 99
$I\text{-}A^{g7}$, peptide-binding motif for, a major histocompatibility complex molecule associated with development of insulin-dependent diabetes mellitis, 1013

ICP47, use of synthetic peptides to define active site of herpes simplex virus inhibitor, 1565
Igα, independently sufficient to mediate B cell antigen receptor functions, 1753
Igβ, independently sufficient to mediate B cell antigen receptor functions, 1753
Immature T cells, in human peripheral blood, identification of population of, 875
Immune complexes, role of repetitive antigen patterns for induction of anti-antibodies, 1785
Immune response
  critical role of secondary lymphoid organs to induce naive T and B cells in antiviral, 2157
  in vivo detection of dendritic cell antigen presentation to $CD4^+$ T cells during, 2133
  interleukin-10 transgenic mice have altered, 2101
  role of CD40–CD40 ligand interaction in cytotoxicity activation of natural killer cells during, 2053
  role of CD86 in induction of mucosal T helper cell 2 and altered airway responsiveness, 1671
  spermine inhibits proinflammatory cytokine synthesis in mononuclear cells in human, 1759
  of T helper cell 2, against non-self antigens modifies cytokines of autoimmune T cells and protects against experimental allergic encephalomyelitis, 901
Immunity, cell-mediated, novel role for complement receptor 3 in regulating, via interleukin-12, 1987
Immunization
  allergic inflammation and, in lungs and airways of B cell–deficient mice, 885
  targeting antigens of HIV-1 for rapid degradation enhances cytotoxic T lymphocyte recognition and induction of CTL responses after, 909
Immunodominance, in HIV-1–specific cytotoxic T lymphocyte responses in identical human histocompatibility leukocyte antigens of infected siblings, 1423
Immunoglobulin A, B cell growth and differentiation modulated by dendritic cells by inducing isotype switch to, 1909
Immunoglobulin E, mouse mast cell FcεRI expression enhanced by, novel amplification mechanism in reactions dependent on, 663
Immunoglobulin G, development of lymphoid follicle structure required for response of, supported by lymphotoxin-α, 2111
Immunoglobulin-like transcript 3, function of novel inhibitory receptor expressed on monocytes, macrophages and dendritic cells during antigen processing, 1743
Immunoglobulins
  characterization and stimulation of rheumatoid factors, 1717
  dendritic cells enhance growth and differentiation of CD40-activated B cells and secretion of, 941
  human B cells induced by forms of signaling lymphocytic activation molecule lead to proliferation and synthesis of, 993
  Igα and Igβ are independently sufficient to mediate B cell antigen receptor functions, 1753
  role in antagonism of T cells by endocytic presentation of peptide analogue, 1043
  role of NF-κB in development and function of lymphocytes and production of, 953
  V(D)J recombination during B cell development induced by gene products of, 609
  V_H subgroup expressed in patients with B cell chronic lymphocytic leukemia, 1435
Immunopathological disease, role of repetitive antigen patterns for induction of anti-antibodies, 1785
Infants, human immunodeficiency virus-1 envelope-specific cytotoxic T lymphocyte responses in vertically infected, 1153
Infection
  characterization and protective potential against, of *Neisseria meningitidis* surface protein, 1173
  expansion of B-1 cells and onset of autoimmune disease in anti-RBC autoantibody transgenic mice triggered by bacterial, 791
  by *Toxoplasma gondii* in mice, role of nitric oxide in resistance to, 1261
  of visceral *Leishmania donovani*, in response model of T helper cells, 867
Infectious disease, two loci control resistance to *Leishmania*, 1705
Infectious mononucleosis, pathogenesis of disease like, induced by herpesvirus, 1641
Inflammation
  of endothelium, relationship between P-selectin, E-selectin and α_4-integrin in allergic, 1077
  function of CC chemokine receptor 1 in hematopoiesis, host defense, cytokine balance and, 1959
  interleukin-10 suppresses cytokine production and allergic bronchopulmonary aspergillosis, 1089
  novel aspirin-triggered lipoxin analogues inhibit neutrophils and acute, 1693
  p50-containing complexes compensate for absence of RelB, 1359
Inflammatory anorexia, induced by multiple cytokines including TNF, 171
Inflammatory response
  associations of CD80 and CD86 with CD28 in T cell activation and, 177
  of collagen-induced arthritis in 5-lipoxygenase–activating protein-deficient mice, role of leukotrienes on, 1123
  in mice, role of 5-lipoxygenase–activating protein during, in the production of leukotrienes, 1065
Inhibitors, of myeloid progenitors, molecular and functional characterization of novel human chemokines as, 1163
Insulin-dependent diabetes mellitis
  peptide-binding motif for $I\text{-}A^{g7}$ associated with development of, 1013
Insulin-dependent diabetes mellitus, role of IFN-γ in destruction of β cells and development of, 531
α_4-integrin, relationship between P- and E-selectin and, in allergic inflammation of endothelium, 1077
Integrin-associated protein, structure-function relationships in signaling of, adhesion-dependent and CD-28 independent costimulation of T cell by, 1
Interferon, MHC expression in mature brain neurons regulated by, 305
Interferon-α/β, role of, on bone marrow aplasia during infection induced by noncytopathic lymphocytic choriomeningitis virus, 517
Interferon-γ
  interleukin-12 enhances antileishmanial activity independent of, 1231
  receptor subunit of interleukin-12 during development of T helper cells is modified by IL-4 and, 817
  role in destruction of β cells and development of insulin-dependent diabetes mellitus, 531
Interferon-I, T cell stimulation in vivo by lipopolysaccharide via pathway involving release of, 2089
Interferon consensus sequence binding protein, role in protection against murine listeriosis, 921
Interferon regulatory factor-1, role in promoting inflammation and autoimmunity in collagen-induced arthritis and allergic encephalomyelitis in mice, 231
Interleukin-1β, purinergic modulation of release of, from microglial cells stimulated with bacterial endotoxin, 579
Interleukin-1β–converting enzyme
  human vascular smooth muscle cells express inhibitory activity of, 1287
  neuronal apoptosis induced by trophic factor withdrawal and ischemic brain injury prevented by, 933
  suppression of apoptosis by shear stress-mediated nitric oxide via inhibition of CPP-32–like proteases and, 601
Interleukin-2
  Elf-1 involvement in responsiveness of, in mouse interleukin-2 receptor α gene, 1211
  receptor β chain of, abnormal development of intestinal intraepithelial lymphocytes and natural killer cells in mice lacking, 499
Interleukin-2 receptor α gene, Elf-1 involvement in responsiveness of interleukin-2 in, 1211
Interleukin-3, plasmacytoid T cells are precursors of dendritic cells with CD40-ligand and, 1101
Interleukin-4
  in $CD4^+$ T cells, IL-6 induces initial production of, 461
  delivered by retrovirus-transduced T cells reduces severity of experimental autoimmune encephalomyelitis, 1711
  lupus-like autoimmune syndrome prevented by, T helper cell differentiation regulated by, 65
  in mice, MHC-controlled expression of, leads to B cell hyperactivity, 329
  production by natural killer T cells in the absence of natural killer markers, 1395
  receptor subunit of interleukin-12 during development of T helper cells is modified by IFN-γ and, 817
  regulatory role of IL-4 to induce development of T helper cells, 373
Interleukin-5, lung-specific expression of, induces pathologic changes characteristic of asthma, 2143
Interleukin-6
  during murine cytomegalovirus infection, characterization of early responses of glucocorticoids and, 1185
  function of soluble receptor of, activates expression of gp130 to stimulate extramedullary hematopoiesis in mice, 755
  initial production of IL-4 in $CD4^+$ T cells induced by, 461
Interleukin-10
  altered immune responses in transgenic mice, 2101
  cytokine production and allergic bronchopulmonary aspergillosis inflammation suppressed by, 1089
Interleukin-12
  complement receptor 3 signaling regulates production of, 1987

interferon-γ-independent antileishmanial activity enhanced by, 1231
macrophage receptor-mediated inhibition of induction of, 1977
in mice, redirects Th2-type responses to an oral vaccine, 415
receptor subunit of, selective expression and regulation of, during Th1/Th2 differentiation, 825
regulation during T helper cell development of receptor subunit of, modification by IL-4 and IFN-γ of, 817
Interleukin-18, produced by osteoblasts, mechanism to inhibit osteoclast formation of, 1005
Interleukins, during murine cytomegalovirus infection, characterization of early responses of glucocorticoids and, 1185
Intestinal intraepithelial lymphocytes, abnormal development of natural killer cells and, in mice lacking IL-2 receptor β chain, 499
Invariant chain, targeting signals in molecules of MHC class II and, that control endocytic presentation of protein determinants are leucine-based, 429
Ischemia reperfusion, induces fragmentation of autoantigens to focus metal-catalyzed oxidation reactions in scleroderma, 71
Isotype switching, dendritic cells induce, of B cells towards immunoglobulin A , 1909
Jak3
crucial function in negative selection of autoreactive T cells and maintenance of functional peripheral T cells, 351
required to maintain T lymphocyte function, roles in thymus and peripheral cells, 197
Kidney disease, pathogenic role of macrophage migration inhibitory factor in rats with, 1455
Kinetics
CD80 binds CD28 and CTLA-4 with low affinity and fast, 393
and extent of T cell activation as measured with calcium signal, 1815
Knockouts, misconceptions about understanding autoimmune disease via experiments with cytokine, 2039
Langerhans cells, expression of skin homing receptor in human peripheral blood on precursors of, 1131
Lectin
galectin-1 induces thymocyte apoptosis, 1851
identification on *Entamoeba* of epitope of, conferring antibody-mediated protection against invasive amebiasis, 1793
Leishmania
interleukin-12 enhances interferon-γ-independent antileishmanial activity, 1231
phagolysosomal biogenesis inhibited by lipophosphoglycan of, 2061
two loci control resistance to, 1705
Leishmania donovani, effect of T helper 2 response on visceral infection by, 867
Leptin, in mice, multiple cytokines and acute inflammation raise levels of, role in anorexia, 171
Leucine-based, targeting signals in invariant chain and MHC class II molecules that control endocytic presentation of protein determinants are, 429
Leukemia
lack of allelic exclusion in B cell chronic lymphocytic, 1435
mutant *N-RAS* induces erythroid lineage dysplasia in human CD34$^+$ cells, 1337
Leukocytes, novel CC chemokine eotaxin-2 selective for CCR3 acts like eotaxin on human eosinophil and basophil, 2171
Leukotrienes
in mice, role of 5-lipoxygenase–activating protein during inflammatory responses in the production of, 1065
role on inflammatory response of collagen-induced arthritis in 5-lipoxygenase–activating protein-deficient mice, 1123
Lipopeptide, isolation, structure and synthesis of *Mycoplasma*-derived macrophage-activating, 1951
Lipophosphoglycan, of *Leishmania*, phagolysosomal biogenesis inhibited by, 2061
Lipopolysaccharide
bacterial, chemokine receptor expression in human monocytes inhibited by, 969
human immunodeficiency virus-1 infection in macrophages and T cells is suppressed by chemokines induced by, 805
macrophage activation and signal transduction in the absence of Src-family kinases induced by, 1661
role of, in endocytic uptake of ceramide and, 2095
T cell stimulation in vivo by, 2089
Lipoxins, novel aspirin-triggered analogues of, inhibit neutrophils and acute inflammation, 1693
5-lipoxygenase–activating protein, role during inflammatory responses in the production of leukotrienes in mice, 1065
Listeria
crucial role of interferon consensus sequence binding protein in protection against, 921
enhanced peptide dissociation from major histocompatibility complex molecules in cytotoxic T lymphocyte immune defenses, 1403
Lung
expression of interleukin-5 specific to, induces pathologic changes characteristic of, 2143
immunization and allergic inflammation in airways of B cell–deficient mice, 885
role of CD86 in induction of mucosal T helper cell 2 immune response and altered airway responsiveness, 1671
Lupus-like autoimmune syndrome, T helper cell differentiation regulated by interleukin-4 prevents, 65
Ly-49A, interrupts early signaling events in natural killer cell cytotoxicity and associates with SHP-1 tyrosine phosphatase, 673
Ly49A, transgenic mice show major histocompatibility complex–dependent education process in natural killer cell development, 2079
Lymphocyte traffic, CD43 is target for manipulation of, and regulation of T cell distribution, 1493
Lymphocytes
human, nonpeptidic antagonist regulates response of ligands in, 91
intestinal intraepithelial, abnormal development of natural killer cells and, in mice lacking IL-2 receptor β chain, 499
role of NF-κB in production of immunoglobulin and development and function of, 953
Lymphocytic choriomeningitis virus
minimal bystander activation of CD8 T cells during polyclonal response induced by, 1629
role of interferon-α/β on bone marrow aplasia during infection induced by, 517
Lymphoid homeostasis, cytokine receptor γ chain regulates fate of CD4$^+$ T cells and controls, 189
Lymphoid organs, critical role in induction of naive T and B cells in antiviral immune response, 2157
Lymphoid tissue, nasal administration of infected milk infects the, and induces mouse mammary tumor virus in adult mice, 1871
Lymphotoxin α
development of lymphoid follicle structure required for immunoglobulin G response supported by, 2111
not required for development of experimental autoimmune encephalomyelitis, 2177
Lytic cycle, early proteins of, are frequent targets of cytotoxic T cell response induced by Epstein-Barr virus, 1605
Macrophage
apoptosis of CD4$^+$ T cells in HIV-infected individuals mediated by FasL and TNF, 55
isolation, structure and synthesis of *Mycoplasma*-derived lipopeptide activated by, 1951
Macrophage activation, induced by lipopolysaccharide in the absence of Src-family kinases, 1661
Macrophage migration inhibitory factor, pathogenic role in kidney disease in rats, 1455
Macrophage receptor, inhibition of interleukin-12 induction mediated by, 1977
Macrophage–derived chemokine, novel chemoattractant for monocytes, dendritic cells and natural killer cells, 1595
Macrophages
differential induction of apoptosis by Fas–Fas ligand interactions in human monocytes and, 1511
function of immunoglobulin-like transcript 3 as novel inhibitory receptor during antigen processing expressed on, 1743
human immunodeficiency virus-1 infection in T cells and, suppressed by chemokines induced by lipopolysaccharide, 805
phagolysosomal biogenesis inhibited by *Leishmania* lipophosphoglycan in, 2061
Macrophage-tropic, novel chemokine receptor–like protein functions as fusion cofactor for, strain of human immunodeficiency virus-1, 2015
Macrophage-tropic viruses, CCR5 levels and expression correlate with infectability by, 1681
Major histocompatibility complex
dendritic cells induce negative but not positive selection of T cells in vivo via targeted expression of class II molecules of, 541
enhanced *Listeria* peptide dissociation from, in cytotoxic T lymphocyte immune defenses, 1403
HLA class I binding motifs derived from peptides vary at COOH terminus, 367
HLA-G inhibits expression of natural killer cells during pregnancy, 385
human cytomegalovirus gene products US11 and US2 differ in abilities to attack class I heavy chains of, 363
human immunodeficiency virus-1 Vpu protein interferes with molecule biosynthesis of, 1295
inhibition of T helper cell 2-mediated autoimmunity by CD4$^+$ T cells; of, 1769
interleukin (IL)-4 expression controlled by, leads to B cell hyperactivity, 329
isotype-specific activator of class II genes functions independently of class II transactivator, 1885

ligands with peptide, agonist properties are controlled by limiting the interaction of CD4 with TCR, 219
Ly49A transgenic mice show education process in natural killer cell development dependent on, 2079
recognition of nonclassical molecule T10 by γδ T cell with peptide-free structure, 1223
role of NH_2 terminus of T cell receptor α chain in recognizing peptide plus, 1919
roles of interferon and tumor necrosis factor to regulate expression in mature brain neurons of, 305
T cells react with, upon restoration of normal density of T cell receptor–CD3 complex, 707
targeting signals in invariant chain and class II molecules of, that control endocytic presentation of protein determinants are leucine-based, 429
Major histocompatibility complex molecule, peptide-binding motif for $I\text{-}A^{g7}$ associated with development of insulin-dependent diabetes mellitis, 1013
Malaria, transfection of primate parasite *Plasmodium* using heterologous constructs, 1499
Mast cells
of mice, immunoglobulin E enhances FcεRI expression in, 663
of rat, isolation and characterization of 10 serine proteases from, determination of mRNA frequencies of proteases of, 13
role of Ras in coupling the FcεR1 to transcriptional regulation, Elk-1 and NFAT regulation in, 43
Maturation
of B cells is regulated by dendritic cells, 801
in growth factor–dependent cultures of mouse dendritic cells, characterization of stages of, 317
temporal asymmetry in CD4 and CD8 thymocytes, 357
Melanoma, B16, tyrosinase-related protein 2 as tumor rejection antigen for, 453
Membrane attack complex, of complement, CD59 active site map and function as inhibitor of, 745
Memory, CD4 T cells, CD45RC isoforms define two types of, role of persisting antigen on, 767
Memory T cells, roles of CD28, B7 and HSA costimulatory pathways for induction of effector and, 251
Meningococcal polysaccharide, of group B, mimics bactericidal capsular epitope, 1929
Meningococcal protein, characterization and protective potential of *Neisseria meningitidis* surface protein, 1173
Messenger RNA, determination of frequencies of, in various rat mast cell proteases, 13
Metal-catalyzed oxidation reactions, in scleroderma, focused by autoantigens with fragmentation induced by ischemia reperfusion, 71
Mice
altered immune responses in interleukin-10 transgenic, 2101
antibody efficacy determined by epitope location in *Cryptococcus neoformans* capsule in, 685
characterization of maturation stages in growth factor–dependent cultures of dendritic cells in, 317
core fragment of T cell receptor α enhancer regulates development of VDJ recombination in, 131
crucial function of Jak3 in negative selection of autoreactive T cells and in maintenance of functional peripheral T cells in, 351
differentiation of T helper cells in the absence of invariant chain during murine infection in, 31
Elf-1 involvement in responsiveness of interleukin-2 in interleukin-2 receptor α gene of, 1211
genetic regulation of T helper cytokine production and encephalitogenicity in, 439
HLA-A2.1–restricted education and cytotoxic T lymphocyte responses in transgenic, 2043
immunization and allergic inflammation in lungs and airways of B cell–deficient, 885
immunoglobulin E enhances FcεRI expression in mast cells of, 663
induction of early growth response family of transcriptional regulators during thymic selection, 731
interleukin-1β converting enzyme inhibitor prevents neuronal apoptosis induced by trophic factor withdrawal and ischemic brain injury in, 933
interleukin (IL)-12 redirects Th2-type responses to an oral vaccine in, 415
isolation of novel monocyte chemoattractant protein-5 with structural and functional similarities to human MCP-1, 99
localization of *Nramp1* protein and association with phagosome membrane to control resistance to parasitic infection in, 717
Ly-49A interrupts early signaling events in natural killer cell cytotoxicity in, 673
major histocompatibility complex–dependent education process in natural killer cell development shown by Ly49A transgenic, 2079
mechanism and evaluation of bystander activation of cytotoxic T cells in transgenic, 1241
MHC-controlled expression of interleukin (IL)-4 leads to hyperactivity of B cells in, 329
nasal administration of infected milk induces mouse mammary tumor virus in adults, 1871
new gene *SRG3* required for glucocorticoid-induced apoptosis in thymocytes of, 1827
peptide affinity for MHC affects apoptosis and Th2 responses in multiple sclerosis therapy, 583
protection from herpes simplex virus-1–induced lethal encephalitis by T cell receptor-γ/δ cells in, 1969
quantitative impact of negative selection on repertoire of thymocytes in, 377
role of chemokine eotaxin in eosinophil recruitment in, 785
role of interferon regulatory factor-1 in promoting inflammation and autoimmunity in collagen-induced arthritis and allergic encephalomyelitis in, 231
role of 5-lipoxygenase–activating protein during inflammatory responses in the production of leukotrienes in, 1065
role of μ opioid receptor in hematopoiesis and reproductive physiology in, 1517
role of nitric oxide in pneumonia induced by herpes simplex virus-1 in, 1533
role of nitric oxide in resistance to infection by *Toxoplasma gondii* in, 1261
soluble receptor of interleukin-6 activates expression of gp130 to stimulate extramedullary hematopoiesis in, 755
transcriptional promoter regulates variable (V) region mutation of antibody heavy chain locus in, 239
transcriptional regulation of T cell development at multiple stages by *δEF* in, 1467
transgenic marker for B lymphoid precursors which express human CD25 in, 653
transgenic with anti-RBC autoantibody, bacterial infections trigger expansion of B-1 cells and onset of autoimmune disease in, 791
various conditions that induce antigen-specific tolerance in $CD4^+$ T cells of, 405
with chronic granulomatous disease, response to and abnormalities resulting from *Aspergillus* exposure, effects of the absence of a respiratory burst in, 207
Microglial cells, purinergic modulation of interleukin-1β release from, stimulated with bacterial endotoxin, 579
β2-microglobulin, human and mouse, three HLA-A2.1 monochains engineered with, 2043
Migration, transendothelial, blocked by soluble domain of platelet–endothelial cell adhesion molecule, 1349
Mimicry, molecular, T cell–mediated autoimmune disease and, 1529
Monocyte chemoattractant protein-1, role in crescentic nephritis and interstitial fibrosis, 1371
Monocyte chemoattractant protein-5, isolation of novel chemokine in mice, structural and functional similarities to human MCP-1, 99
Monocytes
differential induction of apoptosis by Fas–Fas ligand interactions in human macrophages and, 1511
function of immunoglobulin-like transcript 3 as novel inhibitory receptor during antigen processing expressed on, 1743
macrophage-derived chemokine is chemoattractant for, 1595
novel vascular molecule involved in adhesion of, to aortic endothelium in atherogenesis, 2069
Mouse mammary tumor virus
in adults, nasal administration of infected milk induces, 1871
superantigen, characterization of paracrine transfer of, 471
superantigen drives extrafollicular and follicular B cell differentiation leading to virus-specific antibody production, 551
mRNA, nuclear-associated mechanism for downregulation of, using T cell receptor-β mini-gene in response to premature termination codons, 985
Mucosal vaccine, in mice, oral interleukin (IL)-12 redirects Th2-type responses to an oral, 415
Multiple sclerosis
in humans, direct analysis of Fas-sensitive autoreactive T cells in, 1585
peptide affinity for MHC affects apoptosis and Th2 responses in therapy for, 583
Murine, isolation of novel monocyte chemoattractant protein-5 with structural and functional similarities to human MCP-1, 99
Murine cells, CXCR4 is not a species-specific barrier for entry of human immunodeficiency virus-1 in, 1865
Murine cytomegalovirus, characterization of early responses of interleukins and glucocorticoids to infection by, 1185
Murine infection, in mice, differentiation of T helper cells in the absence of invariant chain, 31
Murine listeriosis, role of interferon consensus sequence binding protein in protection against, 921

Muscle cells, in human, express interleukin-1β–converting enzyme inhibitory activity, 1287
Mutation
of variable (V) region of antibody heavy chain locus, transcriptional promoter regulates, 239
in variable (V) region of B cells, importance of transcription in, 185
Mycoplasma, isolation, structure and synthesis of macrophage-activating lipopeptide derived from, 1951
Myeloid progenitors, molecular and functional characterization of novel human chemokines as inhibitors of, 1163
Natural killer cells
abnormal development of intestinal intraepithelial lymphocytes and, in mice lacking IL-2 receptor β chain, 499
HLA-G inhibits expression of natural killer cells during pregnancy, 385
Ly49A transgenic mice show major histocompatibility complex–dependent education process in development of, 2079
macrophage-derived chemokine is chemoattractant for, 1595
mouse Ly-49A interrupts early signaling events in cytotoxicity of, 673
NKG2A covalently associated with CD94 defines novel inhibitory receptor of, 795
p58 inhibitory receptor, direct binding to human histocompatibility leukocyte antigen is peptide-selective, 1523
production of interleukin-4 by, in the absence of natural killer markers, 1395
role of CD40–CD40 ligand interaction in cytotoxicity activation of, 2053
selective binding of novel tumor surface protein with naive, 1735
Natural killer T cells, intrathymic selection and interleukin-4 production in the absence of natural killer markers, 1395
Necrosis, intracellular concentrations of adenosine triphosphate cause distinction between apoptosis and, 1481
Negative selection
of autoreactive T cells, crucial function of Jak3, 351
dendritic cells induce, of T cells in vivo via targeted expression of MHC class II molecules, 541
quantitative impact of, on repertoire of thymocytes in mice, 377
Neisseria meningitidis, characterization and protective potential against infection of surface protein of, 1173
Nephritis, role of monocyte chemoattractant protein-1 in interstitial fibrosis and crescentic, 1371
Neu differentiation factor, isoform of, identified using novel screen for dominant apoptosis-inducing genes, 1137
Neurons
in brain, roles of interferon and tumor necrosis factor to regulate MHC expression in mature, 305
mouse expressing interleukin-1β converting enzyme inhibitor prevents apoptosis in, induced by trophic factor withdrawal and ischemic brain injury, 933
Neutrophils, novel aspirin-triggered lipoxin analogues inhibit, 1693
NF-κB
PMA/PHA-stimulated transcriptional synergy mediated by Egr-1 and, role in T cell development, 491
role in immunoglobulin production and lymphocyte development and function, 953
NH_2 terminus, of T cell receptor α chain, role in major histocompatibility complex plus peptide recognition, 1919
Nitric oxide
mediated by shear stress, suppression of apoptosis by, via inhibition of ICE-like and CPP-32–like proteases, 601
role in pneumonia induced by herpes simplex virus-1 in mice, 1533
role in resistance to infection by *Toxoplasma gondii* in mice, 1261
NKG2A, covalently associated with CD94 defines novel inhibitory natural killer cell receptor, 795
Nramp1 protein, localization of, association with phagosome membrane to control resistance to parasitic infection, 717
N-RAS, erythroid lineage dysplasia in human $CD34^+$ cells induced by mutant, 1337
Nuclear factor, role in T cell development and homeostasis of Rel complexes and, 1897
Nuclear localization, granzyme B crosses cell membrane autonomously and perforin initiates, 855
Nucleus, mechanism for downregulation of mRNA using T cell receptor-β mini-gene in response to premature termination codons associated with, 985
Opacity proteins, during gonorrhea infection, CD66 carcinoembryonic antigens serve as receptors for, 1557
μ opioid receptor, role in hematopoiesis and reproductive physiology in mice, 1517
Oral, interleukin (IL)-12 redirects Th2-type responses to an oral vaccine, 415
Osteoclasts, granulocyte/macrophage colony-stimulating factor mechanism of interleukin-18 to inhibit formation of, 1005
p38.5, selective binding of novel tumor surface protein with naive natural killer cells, 1735
p50, in inflammatory phenotype, absence of RelB compensated for by complexes containing, 1359
p53, tolerance by A2.1-restricted cytotoxic T lymphocytes to, 833
$p56^{lck}$, CD4 and CD8 in T cell receptor domain associated with activation mechanism of, 121
p58 killer cell inhibitory receptor, direct binding to human histocompatibility leukocyte antigen is peptide-selective, 1523
p65, of NF-κB, role in immunoglobulin production and lymphocyte development and function, 953
Paracrine signaling pathway, c-Met–hepatocyte growth factor is, regulating germinal center B cell adhesion, 2121
Paracrine transfer, of mouse mammary tumor virus superantigen, characterization of, 471
Parasites, localization of *Nramp1* protein and association with phagosome membrane to control resistance to infection by, 717
Peptide(s)
affinity for MHC, apoptosis and Th2 responses in multiple sclerosis therapy affected by nature and number of, 583
analogue broadly antagonizes T cells during endocytic presentation, 1043
combinatorial libraries of, tool to identify cross-reactive ligands for autoreactive T cell clones, 1651
direct binding of p58 killer cell inhibitory receptor to human histocompatibility leukocyte antigen is selective for, 1523
effects of epitope modification on TCR binding and antigen recognition by cytotoxic T lymphocyte clones specific for photoreactive derivative of, 629
haptens antagonize trinitrophenyl-specific cytotoxic T cells, 1803
HLA class I binding motifs derived from, variation at COOH terminus, 367
ICP47 inhibits transporter associated with antigen processing-dependent translocation of, 1565
ligands with MHC molecule, agonist properties are controlled by limiting the interaction of CD4 with TCR, 219
of *Listeria*, major histocompatibility complex molecules in cytotoxic T lymphocyte immune defenses exhibit enhanced dissociation of, 1403
recognition by alloreactive cytotoxic T lymphocytes independent of, 1023
recognition of nonclassical major histocompatibility complex molecule T10 by γδ T cell free of, 1223
requirements for T cell receptor downregulation on naive $CD8^+$ T cells induced by, 641
role of NH_2 terminus of T cell receptor α chain in recognizing major histocompatibility complex plus, 1919
Peptide-binding, motif for $I\text{-}A^{g7}$ associated with development of insulin-dependent diabetes mellitis, 1013
Perforin, apoptosis and nuclear entry of granzyme B initiated by, 855
Peripheral blood, in human, identification of precursor population of T cells in, 875
Peripheral expression, of Jak3 is required to maintain T lymphocyte function, 197
Phagolysosomal biogenesis, inhibited by *Leishmania* lipophosphoglycan, 2061
Phagosome, association of *Nramp1* protein with membrane of, to control resistance to parasitic infection, 717
Plasmacytoid T cells, are precursors of dendritic cells with interleukin-3 and CD40-ligand, 1101
Plasminogen, protection against renal injury in crescentic glomerulonephritis by, 963
Plasmodium, transfection of primate malaria parasite using heterologous constructs, 1499
Platelet–endothelial cell adhesion molecule, transendothelial migration blocked by soluble domain of, 1349
Pneumonia, in mice, role of nitric oxide in herpes simplex virus-1–induced, 1533
Positive selection, thymus-derived glucocorticoids regulate antigen-specific, 2003
Pregnancy, HLA-G inhibits expression of natural killer cells during, 385
Premature termination codons, nuclear-associated mechanism for downregulation of mRNA using T cell receptor-β mini-gene in response to, 985
Primates, transfection of malaria parasite *Plasmodium* using heterologous constructs in, 1499
Procoagulant, inactive terminal complement complex activates endothelial cells to express activity of tissue factor, 1619
Progenitor cells, chemokine SDF-1 attracts and is associated with mobilization of $CD34^+$ in humans, 111
Proteases
isolation and characterization of 10 serine, from rat mast cells, determination of mRNA frequencies of, 13
role of, relationship to ceramide in TNF-α–induced pathway of apoptosis, 481
suppression of apoptosis by shear stress-mediated nitric oxide via inhibition of ICE-like and CPP-32–like, 601

Protection
characterization of surface protein of *Neisseria meningitidis* as role in, 1173
group B meningococcal polysaccharide mimics bactericidal capsular epitope, 1929
Protein
active site map and function of CD59, inhibitor of cytolytic membrane attack complex of complement, 745
localization of *Nramp1* and association with phagosome membrane to control resistance to parasitic infection, 717
NKG2A covalently associated with CD94 defines novel inhibitory natural killer cell receptor, 795
phosphorylated during apoptosis, target for autoantibody production in patients with systemic lupus erythematosus, 843
role of interferon consensus sequence binding protein in protection against murine listeriosis, 921
signal transducer and activator of transcription-3 constitutively activated in B-1 cells but only inducibly expressed in conventional B-2 cells, 1035
targeting signals in invariant chain and MHC class II molecules that control endocytic presentation of, are leucine-based, 429
Protein targets, early lytic cycle proteins are frequent targets of cytotoxic T cell response induced by Epstein-Barr virus, 1605
Protein tyrosine kinase, tyrosine phosphorylation of Pyk is regulated by Fyn during signaling of T cell receptors, 1253
P-selectin, PSGL-1 distinguishes Th1 from Th2 cells when binding to, 573
P-selectin glycoprotein ligand-1, distinguishes Th1 from Th2 cells when binding to P-selectin and supports migration into inflamed skin, 573
Pulmonary disease, lung-specific expression of interleukin-5 induces pathologic changes characteristic of asthma, 2143
Purinergic modulation, of interleukin-1β release from microglial cells stimulated with bacterial endotoxin, 579
Pyk, tyrosine phosphorylation of, is regulated by Fyn during signaling of T cell receptors, 1253
R280, crucial role in ligand recognition of human granulocyte/macrophage colony-stimulating factor receptor α chain of, 1939
RAFTK, focal adhesion kinase phosphorylates and associates with signaling molecules upon activation of T cells, 1055
RAG, 12/23-dependent cleavage of, by whole cell extract and DNA-bending proteins in V(D)J recombination, 2025
RANTES, role in renal inflammation and interstitial fibrosis, 1371
Ras, in mast cells, role in coupling the FcεR1 to transcriptional regulation, Elk-1 and NFAT as targets of, 43
Rats
blood–lymph translocation via hepatic sinusoids is pathway for dendritic cells in, 777
mast cells in, isolation and characterization of 10 serine proteases from, determination of mRNA frequencies of proteases of, 13
pathogenic role of macrophage migration inhibitory factor on kidney disease in, 1455
Receptor
of human granulocyte/macrophage colony-stimulating factor, assembly of, 1939
subunit of interleukin-12, selective expression and regulation of, during Th1/Th2 differentiation, 825
Recombination, and regulation of cell cycle and developmental progression of T cells in thymus, 1549
Recombination of V(D)J
12/23-dependent cleavage of RAG by whole cell extract and DNA-bending proteins, 2025
induced by immunoglobulin gene products during B cell development, 609
in mice, core fragment of T cell receptor α enhancer regulates development of, 131
Regulators, in mice, during thymic selection, induction of early growth response family of transcriptional, 731
Rel complexes, role in T cell development and homeostasis of nuclear factor and, 1897
RelB, in inflammatory phenotype, p50-containing complexes compensate for absence of, 1359
Renal injury, plasminogen protects against, in crescentic glomerulonephritis, 963
Reproduction, of mice, role of μ opioid receptor in hematopoiesis and, 1517
Resistance, to *Toxoplasma gondii* in nitric oxide-deficient mice, 1261
Respiratory burst, in mice with chronic granulomatous disease, response to and abnormalities resulting from *Aspergillus* exposure, effects of the absence of, 207
Respiratory disease, lung-specific expression of interleukin-5 induces pathologic changes characteristic of asthma, 2143
Rheumatoid arthritis
cyclophilin A in synovial fluids of patients with, 975
HLA-DR1 transgene mediates immune response to type II collagen in, 1113
in 5-lipoxygenase–activating protein-deficient mice, role of leukotrienes on inflammatory response of, 1123
Rheumatoid factors, characterization and stimulation of, 1721
rho, GTP-binding protein, invasion of epithelial cells by dysentery-causing *Shigella* requires, 281
Scleroderma, autoantigens with fragmentation induced by ischemia reperfusion focus metal-catalyzed oxidation reactions in, 71
Secondary lymphoid organs, critical role in induction of naive T and B cells in antiviral immune response, 2157
Selectins, P- and E-, relationship between α_4-integrin and, in allergic inflammation of endothelium, 1077
Selection, role of signaling motifs by T cell receptor ζ chain in amplification and, 893
Sexually transmitted disease, HIV-1 induces cytotoxic T lymphocytes in cervix of infected women, 293
Shigella, requires GTP-binding protein, rho, to invade epithelial cells and cause dysentery, 281
Sialomucins, 9-O-acetylation of, is novel marker of CD4 T cells regulated during maturation and activation, 1997
Signal transducer and activator of transcription-3, protein constitutively activated in B-1 cells but only inducibly expressed in conventional B-2 cells, 1035
Signal transducer and activator of transcription proteins, development and activation of B-1 cells is regulated by CD5 and, 981
Signal transduction
characterization and activity of novel component of tumor necrosis factor receptor family, 1275
lipopolysaccharide-induced macrophage activation and, in the absence of Src-family kinases, 1661
Vav binding site in ZAP-70 critical in antigen receptor-mediated, 1877
Signaling
biological and biochemical consequence of limiting the interaction of CD4 with TCR is to control agonist properties of peptide–MHC molecule ligands, 219
mechanisms of T cell activation and sustained, 1717
of T cell receptor, focal adhesion kinase (RAFTK) phosphorylates and associates with molecules upon activation of T cells, 1055
Signaling lymphocytic activation molecule, proliferation and immunoglobulin synthesis by human B cells induced by forms of, 993
Signaling motifs, role in selection and amplification by T cell receptor ζ chain, 893
Skin, inflamed, PSGL-1 distinguishes Th1 from Th2 cells when binding to P-selectin and supports migration into, 573
Skin homing receptor, expression on Langerhans cell precursors in human peripheral blood, 1131
Smooth muscle cells, in human, express interleukin-1β–converting enzyme inhibitory activity, 1287
Somatic mutation, characterization of germinal center founder B cells in which apoptosis occurs before onset of, 563
Somatic point mutation, immunodominant antigen of ultraviolet-induced regressor tumor generated by, in coding region of nucleic acid helicase, 695
Spermine, proinflammatory cytokine synthesis in human mononuclear cells inhibited by, 1759
Spleen, development of follicular structure of, required for immunoglobulin G response supported by lymphotoxin-α, 2111
Src-family kinases, lipopolysaccharide-induced macrophage activation and signal transduction in the absence of, 1661
SRG3, new mouse gene required for glucocorticoid-induced apoptosis in thymocytes, 1827
Staphylococcus, transcytosis of superantigen toxins of, 1447
STRL33, novel chemokine receptor–like protein functions as fusion cofactor for diverse human immunodeficiency virus-1 strains, 2015
Stromal cell-derived factor-1, chemokine that attracts and is associated with mobilization of $CD34^+$ hematopoietic progenitor cells in humans, 111
Stromal cells, granulocyte/macrophage colony-stimulating factor mechanism of interleukin-18 to inhibit osteoclast formation, 1005
Superantigen
characterization of paracrine transfer of mouse mammary tumor virus, 471
extrafollicular and follicular B cell differentiation leading to virus-specific antibody production driven by, 551
Surface protein, of *Neisseria meningitidis*, characterization and protective potential of, 1173
Synovial fluids, cyclophilin A in, of patients with rheumatoid arthritis, 975
Systemic lupus erythematosus, proteins phosphorylated during apoptosis are targets for autoantibody production in patients with, 843

T10, recognition of nonclassical peptide-free major histocompatibility complex molecule by γδ T cell, 1223
T cell(s)
abnormal development of intestinal intraepithelial lymphocytes and natural killer cells in mice lacking IL-2 receptor β chain, 499
9-O-acetylation of sialomucins is novel marker of CD4 cells regulated during maturation and activation, 1997
CCR5 levels and expression correlate with infectability by macrophage-tropic human immunodeficiency virus-1, 1681
CD43 is target for manipulation of lymphocyte traffic and regulation of distribution of, 1493
CD45RC isoforms define two types of CD4 memory, role of persisting antigen on, 767
CD81 not required for maturation of, but important for CD19 expression in B cells and stimulation of antibody production, 1505
chronic tumor necrosis factor alters responses of, by attenuating T cell receptor signaling, 1573
combinatorial libraries of peptides as tool to identify cross-reactive ligands for autoreactive, 1651
critical role of secondary lymphoid organs to induce, in antiviral immune response, 2157
CTLA-4 interacts with B7 to positively regulate activation of, 1327
downregulation of T cell receptor in conjugates of antigen-presenting cells and, 1859
in *δEF1* mutant mice, impaired development of, 1467
endocytic presentation of peptide analogue broadly antagonizes, 1043
endogenous lectin galectin-1 induces apoptosis of, 1851
focal adhesion kinase (RAFTK) phosphorylates and associates with signaling molecules upon activation of, 1055
gene recombination, regulation of cell cycle and developmental progression in thymus of, 1549
haptens antagonize trinitrophenyl-specific cytotoxic, 1803
in human, CD1 marks functional maturation and defines control point in late stages of development of, 141
human immunodeficiency virus-1 envelope-specific cytotoxic T lymphocyte responses in vertically infected infants, 1153
human immunodeficiency virus-1 infection in macrophages and, suppressed by chemokines induced by lipopolysaccharide, 805
in human peripheral blood, identification of precursor population of, 875
in vivo detection of dendritic cell antigen presentation to $CD4^+$, 2133
in vivo stimulation by lipopolysaccharide of, 2089
integrin-associated protein in costimulation of, adhesion-dependent and CD28-independent signaling, 1
interleukin-4 delivered by retrovirus-transduced, reduces severity of experimental autoimmune encephalomyelitis, 1711
intracellular concentrations of adenosine triphosphate cause distinction between apoptosis and necrosis in, 1481
kinetics and extent of activation of, as measured with calcium signal, 1815
lineage relationships and differentiation of natural killer, 1395
mechanisms of regulation of, involved in control of experimental autoimmune encephalomyelitis and collagen II–induced arthritis, 1725
mechanisms of sustained signaling and activation of, 1717
in mice, crucial function of Jak3 in negative selection of, maintenance of functional peripheral, 351
in mice, quantitative impact of negative selection on repertoire of, 377
minimal bystander activation of CD8 T cells during virus-induced polyclonal response of, 1629
molecular mimicry and autoimmune disease mediated by, 1529
in multiple sclerosis in humans, direct analysis of Fas-sensitive autoreactive, 1585
new mouse gene *SRG3* required for glucocorticoid-induced apoptosis in, 1827
peptide-independent recognition by alloreactive cytotoxic T lymphocytes, 1023
plasmacytoids are precursors of dendritic cells with interleukin-3 and CD40-ligand, 1101
PMA/PHA-stimulated transcriptional synergy mediated by NF-κB and Egr-1 in development of, 491
range of coreceptors for infection into $CD4^+$ cells of HIV-1 associated with progression to AIDS, 621
react with self–major histocompatibility complex molecules upon restoration of normal density of T cell receptor–CD3 complex, 707
recognition of nonclassical peptide-free major histocompatibility complex molecule T10 by γδ, 1223
regulatory role of tumor necrosis factor receptor-associated factor TRAF in antigen-induced apoptosis of, 1777
responses to mycobacterial heat-shock protein in regulation of autoimmune arthritis, 1307
role of NF-κB in production of immunoglobulin and development and function of, 953
roles of nuclear factor and Rel complexes in development and homeostasis of, 1897
roles of TCR-αβ and TCR-γδ in development of pre–, 1541
stimulation with DPG induces partial tyrosine phosphorylation and unresponsiveness with certain ligands of, 91
telomere length and activity and replicative potential of $CD4^+$ and $CD8^+$ infected with human immunodeficiency virus-1, 1381
temporal asymmetry in CD4 and CD8 maturation, 357
in thymic medulla, comprise 2 distinct subsets: fully mature are resistant to tolerance induction and semimature are tolerance susceptible, 263
tolerance to p53 by A2.1-restricted cytotoxic T lymphocytes, 833
in transgenic mice, mechanism and evaluation of bystander activation of cytotoxic, 1241
T cell activation, associations of CD80 and CD86 with CD28 in inflammatory response and, 177
T cell receptor(s)
biological and biochemical consequence of limiting the interaction of CD4 with TCR is to control agonist properties of peptide–MHC molecule ligands, 219
γ/δ cells, protect mice from herpes simplex virus-1–induced lethal encephalitis, 1969
α chain NH_2 terminus of, role in major histocompatibility complex plus peptide recognition, 1919
ζ chain of, role of signaling motifs in selection and amplification by, 893
chronic tumor necrosis factor alters T cell responses by attenuating signaling of, 1573
core fragment of α enhancer regulates development of VDJ recombination in mice, 131
downregulation of, in T cell–antigen-presenting cell conjugates, 1859
effects of epitope modification on binding of, antigen recognition by cytotoxic T lymphocyte clones specific for photoreactive peptide derivative, 629
kinetics and extent of T cell activation as measured with calcium signal, 1815
mechanisms of sustained signaling and activation of T cells, 1717
β mini-gene, nuclear-associated mechanism for downregulation of mRNA in response to premature termination codons using, 985
nonmitogenic anti-CD3 monoclonal antibodies deliver partial signal to, and induce clonal anergy, 1413
$p56^{lck}$ activation mechanism associated with CD4 and CD8 in domain of, 121
requirements for peptide-induced downregulation of, on naive $CD8^+$ T cells, 641
roles of TCR-αβ and TCR-γδ in development of pre-T cells, 1541
T cells in CD3 complex react with self–major histocompatibility complex molecules upon restoration of normal density of, 707
thymus-derived glucocorticoids regulate antigen-specific positive selection, 2003
tyrosine phosphorylation of Pyk is regulated by Fyn during signaling of, 1253
T cell receptor-δ gene, role of transcription factor CBF/PEBP2 in regulation of, to activate VDJ recombination, 1193
T cell-tropic, novel chemokine receptor–like protein functions as fusion cofactor for, strain of human immunodeficiency virus-1, 2015
T helper cell 2
immune response of, against non-self antigens modifies cytokines of autoimmune T cells and protects against experimental allergic encephalomyelitis, 901
lung mucosal, role of CD86 in induction of immune response of, 1671
self–major histocompatibility complex $CD4^+$ T cells inhibit autoimmunity mediated by, 1769
T helper cells
behavior of visceral *Leishmania donovani* infection in response model of, 867
during murine infection in mice, role of invariant chain in differentiation of, 31
Fas-mediated unequal apoptosis in effectors of, 1837
IL-4 and IFN-γ modify receptor subunit of interleukin-12 during development of, 817
in inbred mice, genetic regulation of production and encephalitogenicity of, 439
interleukin-4 prevents lupus-like autoimmune syndrome by regulating differentiation of, 65
in multiple sclerosis therapy, peptide affinity for MHC affects apoptosis and responses of, 583

PSGL-1 distinguishes Th1 from Th2 cells when binding to P-selectin and supports migration into inflamed skin, 573
regulatory roles of IL-4 and IL-6 to induce development of, 373
selective expression and regulation of interleukin-12 receptor subunit during Th1/Th2 differentiation, 825
T helper type 2, in mice, oral interleukin (IL)-12 redirects responses of, to an oral vaccine, 415
T lymphocytes
in cervix of infected women, HIV-1 induces cytotoxic, 293
role of Jak3 in thymus and peripheral cells, peripheral expression required to maintain function of, 197
role of transcription factor CBF/PEBP2 in regulation of T cell receptor-δ gene to activate VDJ recombination in, 1193
roles of CD28, B7 and HSA costimulatory pathways for induction of effector and memory, 251
TCR-αβ, role in development of pre–T cells, 1541
TCR-γδ
response regulation to nonpeptidic antagonist by ligands of, 91
role in development of pre–T cells, 1541
Telomerase activity, and replicative potential of $CD4^+$ and $CD8^+$ T cells infected with human immunodeficiency virus-1, 1381
Telomere length, and replicative potential of $CD4^+$ and $CD8^+$ T cells infected with human immunodeficiency virus-1, 1381
Th2 cells, regulatory roles of IL-4 and IL-6 to induce development of, 373
Th2-type responses, induced by nontoxic mutants in ADP-ribosyltransferase of cholera toxin, 1203
Thrombosis, antithrombotic effects of ATP diphosphohydrolase activity are lost after activation of endothelial cells, 153
Thymocytes
endogenous lectin galectin-1 induces apoptosis of, 1851
in human, CD1 marks functional maturation and defines control point in late stages of development of, 141
in vivo, dendritic cells induce negative but not positive selection of, via targeted expression of MHC class II molecules, 541
in mice, quantitative impact of negative selection on repertoire of, 377
new mouse gene *SRG3* required for glucocorticoid-induced apoptosis in, 1827
$p56^{lck}$ activation mechanism associated with CD4 and CD8 in domain of, 121
Thymus
antigen-specific positive selection regulated by glucocorticoids derived in, 2033
gene recombination, regulation of cell cycle and developmental progression of T cells in, 1549
in mice, crucial function of Jak3 in negative selection of autoreactive T cells in, 351
in mice, induction of early growth response family of transcriptional regulators during selection in, 731
medullary T cells comprise 2 distinct subsets: fully mature are resistant to tolerance induction and semimature are tolerance susceptible, 263
Tissue factor procoagulant, inactive terminal complement complex activates endothelial cells to express activity of, 1619
TNF receptor-associated factor, in regulation of signal transduction, 1275
Tolerance, antigen-specific, in $CD4^+$ T cells of mice, various conditions that induce, 405
Tolerance induction, thymic medullary T cells comprise 2 distinct subsets which, based on maturity, differ in sensitivity to, 263
Toxic shock syndrome, transcytosis of superantigen toxins of *Staphylococcus*, 1447
Toxins, transcytosis of superantigens of *Staphylococcus*, 1447
Toxoplasma gondii, in mice, role of nitric oxide in resistance to infection by, 1261
TRAF, regulatory role in antigen-induced apoptosis of T cells, 1777
TRAF-interacting protein, characterization and activity of novel component of tumor necrosis factor receptor family, 1275
Transactivator, isotype-specific activator of major histocompatibility complex class II genes functions independently of, 1885
Transcription
in mice, during thymic selection, induction of early growth response family of regulators of, 731
PMA/PHA-stimulated, synergy mediated by Egr-1 and NF-κB, role in T cell development, 491
regulates variable (V) region mutation of antibody heavy chain locus, 239
in variable (V) region mutation, in B cells, 185
Transcriptional regulation, of T cell development at multiple stages by *δEF* in mice, 1467
Transendothelial migration, blocked by soluble domain of platelet–endothelial cell adhesion molecule, 1349
Transfection systems, of primate malaria parasite *Plasmodium* using heterologous constructs, 1499
Transfer, paracrine, characterization of mouse mammary tumor virus superantigen, 471
Transforming growth factor-β, in rats, estrogen protects lenses against cataracts induced by, 273
Transgenic marker, for mouse B lymphoid precursors which express human CD25, 653
Transporter associated with antigen processing, ICP47 inhibits peptide translocation dependent on, 1565
Trinitrophenyl, haptens antagonize cytotoxic T cells specific to, 1803
Tumor
somatic, mutation specific to, in coding region of nucleic acid helicase, 695
tyrosinase-related protein 2 as rejection antigen for B16 melanoma, 453
Tumor necrosis factor
chronic exposure alters T cell responses by attenuating T cell receptor signaling, 1573
cooperative roles of TNFR60 and TNFR80 in regulating HIV production and inducing apoptosis, 81
increase of leptin levels in mice induced by, role in anorexia of, 171
MHC expression in mature brain neurons regulated by, 305
role in mediating macrophage-induced apoptosis of $CD4^+$ T cells in HIV-infected individuals, 55
Tumor necrosis factor-α
not required for development of experimental autoimmune encephalomyelitis, 2177
relationship of proteases to ceramide in apoptotic pathway induced by, 471
Tumor necrosis factor receptor, regulatory role of associated factor TRAF in antigen-induced apoptosis of T cells, 1777
Tumor necrosis factor receptor family
characterization and activity of novel component of, 1275
identification of amino acid residues important for ligand binding to Fas, 1487
Tumor surface protein, selective binding of novel p38.5 with naive natural killer cells, 1735
Tyrosinase-related protein 2, role as tumor rejection antigen for B16 melanoma, 453
Tyrosine kinase, role of Jak3 in thymus and peripheral cells, peripheral expression required to maintain T lymphocyte function, 197
Tyrosine phosphatase, SHP-1, important mediator of mouse Ly-49A function, 673
Tyrosine phosphorylation, role of HS1 in B cell antigen receptor-mediated apoptosis, 1387
Upper respiratory tract, nasal administration of infected milk induces mouse mammary tumor virus in adult mice, 1871
Variable (V) region mutation
of antibody heavy chain locus, transcriptional promoter regulates, 239
in B cells, importance of transcription in, 185
Vascular adhesion-associated protein, role in monocyte adhesion to aortic endothelium in atherogenesis, 2069
Vascular injury, antithrombotic effects of ATP diphosphohydrolase activity are lost after activation of endothelial cells, 153
Vascular smooth muscle cells, in human, express interleukin-1β–converting enzyme inhibitory activity, 1287
Vav, binding site in ZAP-70 critical in antigen receptor-mediated signal transduction, 1877
V(D)J recombination
12/23-dependent cleavage of RAG by whole cell extract and DNA-bending proteins, 2025
induced by immunoglobulin gene products during B cell development, 609
in mice, core fragment of T cell receptor α enhancer regulates development of, 131
role of transcription factor CBF/PEBP2 in regulation of T cell receptor-δ gene to activate, 1193
Vesicular transport, role of lipopolysaccharide in endocytic uptake of lipopolysaccharide and ceramide, 2095
Viral infection, critical role of secondary lymphoid organs to induce naive T and B cells in immune response, 2157
Viral superantigen, infectious mononucleosis-like disease induced by cytokines and, 1641
Virus
role of interferon-α/β on bone marrow aplasia during infection induced by lymphocytic choriomeningitis, 517
superantigen drives extrafollicular and follicular B cell differentiation leading to antibody production specific to, 551
Virus superantigen, characterization of paracrine transfer of mouse mammary tumor, 471
Vpu, human immunodeficiency virus-1 protein interferes with major histocompatibility complex molecule biosynthesis, 1295
Whole cell extract, 12/23-dependent cleavage of RAG by DNA-bending proteins and, in V(D)J recombination, 2025
ZAP-70, Vav binding site in, critical in antigen receptor-mediated signal transduction, 1877